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The regulatory material appearing herein is keyed to the CODE OF FEDERAL REGULATIONS, which is published, under 50 titles, pursuant to section 11 of the Federal Register Act, as amended (44 U.S.C. 1510). The CODE OF FEDERAL REGULATIONS is sold by the Superintendent of Documents. Prices of new books are listed in the first FEDERAL REGISTER issue of each month.

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SUBCHAPTER A—AGRICULTURAL CONSERVATION PROGRAMS

[Amdt. 1]

PART 706—NAVAL STORES CONSERVATION

Subpart G—1971

MISCELLANEOUS AMENDMENTS

The regulations governing the 1971 Naval Stores Conservation Program, 36 F.R. 7835, are amended as follows:

1. A new § 706.918a is inserted immediately after § 706.918 to read as follows:

§ 706.918a Practice 11: Planting of superior trees.

(a) *Purpose.* The purpose of this practice is to improve the stocking of depleted forest land with trees of proven increased oleoresin yield and faster wood growth. Such trees will produce more crude gum, pulpwood, sawtimber, plywood, poles, and other forest products.

(b) *Description of practice.* This practice consists of planting certified genetically superior high gum yielding slash pine seedlings, developed from the Olustee strain, on properly prepared sites and at spacings specified by the U.S. Forest Service.

(c) *Eligible acres.* Only land owned by a participant which is selected and planted in accordance with provisions prescribed by the U.S. Forest Service is eligible for cost-sharing.

(d) *Rate of cost-sharing.* The rate of cost-sharing for this practice is 80 percent of the actual cost not to exceed \$20 per acre.

2. Section 706.932 is amended by adding a new paragraph (d) to read as follows:

§ 706.932 Availability of funds.

(d) The regulations in Part 796 of this chapter prohibiting the making of payments to program participants who, after August 10, 1971, harvest or knowingly permit to be harvested for illegal use marijuana or other such prohibited drug-producing plants on any part of the lands owned or controlled by them are applicable to this program.

Effective date. Since the 1971 program is nearing completion, it is essential that the foregoing amendment to the Naval Stores Conservation Program be made effective as soon as possible. It is hereby found and determined that compliance

with the notice and public procedure provisions of 5 U.S.C. 553 is impracticable and contrary to the public interest. Accordingly, this amendment shall become effective upon publication in the FEDERAL REGISTER (11-25-71).

(Sec. 4, 49 Stat. 104, 16 U.S.C. 590d; sec. 508, Public Law 92-73, 85 Stat. 201)

Signed at Washington, D.C., on November 22, 1971.

J. PHIL CAMPBELL,
Acting Secretary of Agriculture.

[FR Doc.71-17290 Filed 11-24-71; 8:56 am]

Chapter IX—Consumer and Marketing Service (Marketing Agreements and Orders; Fruits, Vegetables, Nuts), Department of Agriculture

[Navel Orange Reg. 241]

PART 907—NAVEL ORANGES GROWN IN ARIZONA AND DESIGNATED PART OF CALIFORNIA

Limitation of Handling

§ 907.541 Navel Orange Regulation 241.

(a) *Findings.* (1) Pursuant to the marketing agreement, as amended, and Order No. 907, as amended (7 CFR Part 907, 35 F.R. 16359), regulating the handling of Navel oranges grown in Arizona and designated part of California, effective under the applicable provisions of the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601-674), and upon the basis of the recommendations and information submitted by the Navel Orange Administrative Committee, established under the said amended marketing agreement and order, and upon other available information, it is hereby found that the limitation of handling of such Navel oranges, as hereinafter provided, will tend to effectuate the declared policy of the act.

(2) It is hereby further found that it is impracticable and contrary to the public interest to give preliminary notice, engage in public rule making procedure, and postpone the effective date of this section until 30 days after publication hereof in the FEDERAL REGISTER (5 U.S.C. 553) because the time intervening between the date when information upon which this section is based became available and the time when this section must become effective in order to effectuate the declared policy of the act is insufficient, and a reasonable time is permitted, under the circumstances, for preparation for such effective time; and good cause exists for making the provisions hereof effective as hereinafter set forth. The committee held an open meeting during the current week, after giving due notice thereof, to consider supply and market conditions for Navel oranges

and the need for regulation; interested persons were afforded an opportunity to submit information and views at this meeting; the recommendation and supporting information for regulation during the period specified herein were promptly submitted to the Department after such meeting was held; the provisions of this section, including its effective time, are identical with the aforesaid recommendation of the committee, and information concerning such provisions and effective time has been disseminated among handlers of such Navel oranges; it is necessary, in order to effectuate the declared policy of the act, to make this section effective during the period herein specified; and compliance with this section will not require any special preparation on the part of persons subject hereto which cannot be completed on or before the effective date hereof. Such committee meeting was held on November 23, 1971.

(b) *Order.* (1) The respective quantities of Navel oranges grown in Arizona and designated part of California which may be handled during the period November 26, 1971, through December 2, 1971, are hereby fixed as follows:

- (i) District 1: 748,000 Cartons;
- (ii) District 2: Unlimited;
- (iii) District 3: 152,000 Cartons.

(2) As used in this section, "handled," "District 1," "District 2," "District 3," and "carton" have the same meaning as when used in said amended marketing agreement and order.

(Secs. 1-19, 48 Stat. 311 as amended; 7 U.S.C. 601-674)

Dated: November 24, 1971.

PAUL A. NICHOLSON,
Deputy Director, Fruit and
Vegetable Division, Consumer
and Marketing Service.

[FR Doc.71-17406 Filed 11-24-71; 11:37 am]

PART 928—PAPAYAS GROWN IN HAWAII

Subpart—Rules and Regulations

Notice was published in the FEDERAL REGISTER issue of November 2, 1971 (36 F.R. 20980), that the Department was giving consideration to proposed rules and regulations (§§ 928.141; 928.150; 928.151; 928.152; and 929.160) hereinafter designated as Subpart—Rules and Regulations, pursuant to the applicable provisions of the marketing agreement and Order No. 928 (7 CFR Part 928; 36 F.R. 8925) regulating the handling of papayas grown in Hawaii, hereinafter referred to collectively as the "order".

This is a regulatory program effective under the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601-674). The aforesaid rules and regulations were proposed by the Papaya Administrative Committee, the agency established under said order to administer the provisions thereof. No written data, views, or arguments were filed with respect to said proposal during the period specified therein in the notice.

The rules and regulations hereinafter set forth are issued pursuant to §§ 928.54 and 928.60 of the order and will establish (1) prerequisites for certain types of papaya shipments to be relieved from inspection and certification requirements of the agreement and order, (2) requirements to be met by handlers of such types of shipments in order to secure and maintain the exempt status of the shipments; (3) safeguards to assure that unregulated shipments of papayas to charitable institutions, relief agencies, and for market research and development projects will not be used for any other purpose; (4) requirements to assure that papayas for commercial processing will not be handled in a manner contrary to the exemptive provisions of the agreement and order; (5) reporting requirements for assessment purposes and to ascertain the disposition of papayas; and (6) interest charges for late payment of assessment funds. Shipments of papayas are now in progress and these rules and regulations reflect the committee's experience and judgment as to the administrative requirements necessary to the proper and efficient operation of the program.

The phrase "after application for and receipt of committee approval," as it appears in paragraph (b) of § 928.151, was inadvertently omitted from paragraphs (c) and (d) of that section in the published notice. Therefore, said phrase is hereby inserted in paragraphs (c) and (d) of § 928.151 in the same locations, respectively, as it appears in paragraph (b) of that section.

After consideration of all relevant matter presented, including that in the notice, it is hereby found that issuance, as hereinafter set forth, of said rules and regulations is in accordance with said order and will tend to effectuate the declared policy of the act.

The rules and regulations are as follows:

Sec.	
928.141	Interest charges.
928.150	Exemption from inspection.
928.151	Special purpose shipments.
928.152	Maturity exemption.
928.160	Utilization reports.

AUTHORITY: The provisions of this Subpart issued under sections 1-19, 48 Stat. 31, as amended; 7 U.S.C. 601-674.

Subpart—Rules and Regulations

§ 928.141 Interest charges.

(a) Assessments levied pursuant to § 928.41 not paid within 5 days after the 15th of the month on papayas handled during the preceding month shall be subject to an interest charge of three-fourths of 1 percent per month.

(b) Notification that assessments are due not later than 5 days after the 15th of each month shall constitute a demand on a handler for the payment of his pro rata share of expenses within the meaning of § 928.41(a).

§ 928.150 Exemption from inspection.

(a) **Waivers.** A handler may handle papayas without inspection and certification, as prescribed under § 928.55, if all the following conditions are met:

(1) The handler requests the Federal-State Inspection Service to provide inspection during its regular working hours at least 2 hours in advance of the time when inspection is needed. The request need not be in writing but it shall be confirmed immediately in writing on a waiver form supplied by the inspection service;

(2) The Federal-State Inspection Service advises the handler that it is not practicable to provide inspection at the time and place designated by the handler. Such advice may be verbal but it shall be confirmed in writing by the Federal-State Inspection Service by execution of the waiver form on which the handler submitted his written request. A confirmed copy thereof shall be forwarded by the inspection service to the office of the Papaya Administrative Committee;

(3) The Federal-State Inspection Service furnishes the handler with the number of the waiver which shall cover the fruit on which inspection is requested;

(4) When so instructed, the handler plainly and conspicuously marks one end of each container with the letter "W" and the waiver number supplied by the Federal-State Inspection Service. The letter W and the number so marked shall be not less than one-half inch in height.

§ 928.151 Special purpose shipments.

(a) Papayas delivered to a handler for sale by the handler for the account of the grower shall be deemed a consignment only with respect to papayas which are actually sold by the handler; consignment shall not extend to those papayas delivered but disposed of by dumping as evidenced by a dumping certificate issued by the Federal-State Inspection Service. Papayas not consigned as herein defined shall not be subject to assessment levied pursuant to § 928.41.

(b) Any handler may, after application for and receipt of committee approval, handle papayas to be used as animal feed exempt from the provisions of §§ 928.41, 928.52, 928.53, and 928.55 and the regulations issued thereunder.

(1) Such application shall be made prior to handling, on the forms provided by the committee and shall be accompanied by certification stating that the fruit will be used for the applied for purpose.

(c) Any handler may, after application for and receipt of committee approval, handle papayas exempt from the provisions of §§ 928.41, 928.52, 928.53, and 928.55, and the regulations issued thereunder: *Provided*, That such fruit is

donated for use by charitable institutions or distribution by relief agencies.

(d) Any handler may, after application for and receipt of committee approval, handle papayas exempt from the provisions of §§ 928.41, 928.52, 928.53, and 928.55 and the regulations issued thereunder, for market research and development projects.

(e) Any handler may handle papayas exempt from the provisions of §§ 928.41, 928.52, 928.53, and 928.55 and the regulations issued thereunder, for commercial processing. Commercial processing of papayas means to can, freeze, cook, slice, dice, or pickle or convert such fruit into a beverage base for resale. All other product forms are considered fresh fruit and are subject to the provisions of the agreement and order.

§ 928.152 Maturity exemption.

(a) Any handler may handle immature papayas exempt from the maturity requirements issued pursuant to § 928.52: *Provided*, That such papayas are handled to an outlet authorized by the committee for resale of such papayas.

(1) A request for such authorization shall be submitted to the committee prior to the receipt of the exempted fruit.

(2) Containers of such fruit shall be clearly marked "off-grade-immature" in letters not less than one-half inch in height.

(3) Immature papayas are papayas which do not meet the maturity requirements of State of Hawaii Department of Agriculture's Wholesale Standards for Hawaii-Grown Papayas (subsection 5.32).

§ 928.160 Utilization reports.

(a) Each handler shall file with the Papaya Administrative Committee, not later than the 15th day of each month, a duly executed PAC Form 1 reporting all papayas handled by him during the immediately preceding calendar month. Such report shall include, but is not limited to, the following information: (1) Quantity of papayas handled subject to assessments and regulations including the date, destination, and inspection certificate number of each shipment; (2) quantity of papayas handled without regard to the assessment or regulatory provisions of the marketing agreement and order with such quantity itemized as to the amount (i) shipped to authorized commercial processors, (ii) donated to charitable organizations or relief agencies, (iii) shipped to authorized market research and development projects, and (iv) disposed of otherwise, and indicating such disposition.

It is hereby found that good cause exists for not postponing the effective date hereof until 30 days after publication in the FEDERAL REGISTER (5 U.S.C. 553) in that (1) the handling of papayas is now in progress and to be of maximum benefit the provisions of these rules and regulations should become effective as soon as possible, (2) the effective date hereof will not require of handlers any preparation that cannot be completed prior thereto, and (3) these rules and

regulations were recommended by members of the Papaya Administrative Committee in open meetings at which all interested persons were afforded an opportunity to express their views.

Dated November 22, 1971, to become effective upon publication in the FEDERAL REGISTER (11-25-71).

PAUL A. NICHOLSON,
Deputy Director, Fruit and Vegetable Division, Consumer and Marketing Service.

[FR Doc.71-17288 Filed 11-24-71;8:54 am]

PART 989—RAISINS PRODUCED FROM GRAPES GROWN IN CALIFORNIA

Minimum Grade and Condition Standards for Natural Condition Raisins

Notice was published in the November 11, 1971, issue of the FEDERAL REGISTER (36 F.R. 21599) regarding a proposal to amend the minimum grade and condition standards for natural condition Thompson seedless raisins. The amendment is pursuant to § 989.58(b) and adds provisions to § 989.201A.2.b. of Subpart—Supplementary Orders Regulating Handling (7 CFR 989.201) permitting any handler, subject to prior agreement between the handler and tenderer, to acquire or receive, as standard raisins, lots of such raisins containing less than 45 percent but not less than 35 percent, by weight, of B maturity, or better raisins. Such additional provisions would be for the 1971-72 crop year ending August 31, 1972.

The proposal was based on a recommendation of the Raisin Administrative Committee and other available information. The committee is established under, and its recommendations are made in accordance with, the provisions of the marketing agreement, as amended, and Order No. 989, as amended (7 CFR Part 989), regulating the handling of raisins produced from grapes grown in California, hereinafter referred to collectively as the "order". The order is effective under the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601-674), hereinafter referred to as the "act".

The notice afforded interested persons an opportunity to submit written data, views, or arguments on the proposal. Comments favoring the proposal were received from 10 persons within the period prescribed therefor.

Section 989.201 requires, among other things, that standard natural condition Thompson seedless raisins contain not less than 45 percent, by weight, of B maturity, or better, raisins (raisins showing development characteristic of raisins prepared from well-matured or reasonably well-matured grapes). The amendment of § 989.201, as hereinafter set forth, permits handlers to acquire or receive, as standard raisins, any lot of natural condition Thompson seedless raisins containing less than 45 percent, by weight, but not less than 35 percent, by weight, of raisins having B maturity, or better raisins. Such lot would be considered as an acceptable lot for handler acquisition as standard raisins with a determinable weight meeting the maturity requirements for standard raisins. The weight of such lot to be credited as standard raisins would be determined by multiplying the weight of such lot by the appropriate dockage factor.

Data collected by the inspection service indicate the maturity level of the 1971 production of natural condition Thompson seedless raisins is considerably below the level in recent years, thus many lots of such raisins when taken in their entirety, would be off-grade. While excessive quantities of immature raisins in such lots can be removed during normal processing, off-grade lots are not processed simultaneously with standard raisins pursuant to provisions currently effective under the order. This amendment would afford handlers greater flexibility in processing raisins and since the excess immature raisins could be removed from a lot during normal processing, producers would not incur the costs for reconditioning such lots.

After consideration of all relevant matter presented, including that in the notice, written comments submitted pursuant to the notice, the information and recommendation of the committee, and other available information, it is found that, pursuant to § 989.58(b) of the order, amendment of subdivision b. of § 989.201A.2., as hereinafter set forth, will tend to effectuate the declared policy of the act.

Therefore, said subdivision is amended to read as follows:

§ 989.201 Changes in minimum grade and condition standards for natural condition raisins.

a. Thompson seedless raisins.

2. a. * * *

b. Shall contain not less than 45 percent, by weight, of B maturity, or better, raisins (raisins showing development characteristic of raisins prepared from well-matured or reasonably well-matured grapes) and not more than 12 percent, by weight, of substandard raisins (raisins that show development less than that characteristic of raisins prepared from fairly well-matured grapes): Provided, That, for the 1971-72 crop year ending August 31, 1972, with respect to natural condition Thompson seedless raisins and subject to prior agreement between handler and tenderer, any lot containing less than

45 percent, but not less than 35 percent, by weight, of raisins having B maturity or better, may be considered as meeting the maturity requirement for handler acquisition as standard raisins but the creditable weight of the lot as standard raisins shall be that obtained by multiplying the total weight of the lot by the appropriate dockage factor selected from the following table:

B maturity or better	Dockage factor
44.0-44.5	.989
44.4-44.0	.978
43.9-43.5	.967
43.4-43.0	.956
42.9-42.5	.944
42.4-42.0	.933
41.9-41.5	.922
41.4-41.0	.911
40.9-40.5	.900
40.4-40.0	.889
39.9-39.5	.878
39.4-39.0	.867
38.9-38.5	.856
38.4-38.0	.844
37.9-37.5	.833
37.4-37.0	.822
36.9-36.5	.811
36.4-36.0	.800
35.9-35.5	.789
35.4-35.0	.778

It is further found that good cause exists for not postponing the effective time of this action until 30 days after publication in the FEDERAL REGISTER (5 U.S.C. 553) in that: (1) This action makes application of the minimum grade and condition standards applicable to natural condition Thompson seedless raisins of the 1971-72 crop year less restrictive; (2) the 1971-72 crop year began September 1, 1971, and natural condition Thompson seedless raisins of such year are being received by handlers now, hence to obtain maximum benefit from this action, it should become effective as soon as possible; (3) handlers are aware that this action has been recommended by the committee and need no additional time to comply; and (4) no useful purpose would be served by postponing the effective time hereof.

(Secs. 1-19, 48 Stat. 31, as amended; 7 U.S.C. 601-674)

Dated: November 22, 1971.

PAUL A. NICHOLSON,
Deputy Director, Fruit and Vegetable Division, Consumer and Marketing Service.

[FR Doc.71-17289 Filed 11-24-71;8:54 am]

**Chapter XXVII—Environmental Protection Agency
REDESIGNATION AND REPUBLICATION**

CROSS REFERENCE: For a document affecting the changes described above, see Title 40, F.R. Doc. 71-17201, appearing in this issue.

Title 9—ANIMALS AND ANIMAL PRODUCTS

Chapter I—Animal and Plant Health Service,¹ Department of Agriculture

SUBCHAPTER C—INTERSTATE TRANSPORTATION OF ANIMALS AND POULTRY

[Docket No. 71-600]

PART 76—HOG CHOLERA AND OTHER COMMUNICABLE SWINE DISEASES

Areas Quarantined

Pursuant to the provisions of the Act of May 29, 1884, as amended, the Act of February 2, 1903, as amended, the Act of March 3, 1905, as amended, the Act of September 6, 1961, and the Act of July 2, 1962 (21 U.S.C. 111-113, 114g, 115, 117, 120, 121, 123-126, 134b, 134f), Part 76, Title 9, Code of Federal Regulations, restricting the interstate movement of swine and certain products because of hog cholera and other communicable swine diseases, is hereby amended in the following respects:

1. In § 76.2, the reference to the State of Pennsylvania in the introductory portion of paragraph (e) and paragraph (e) (3) relating to the State of Pennsylvania are deleted, and paragraph (f) is amended by adding thereto the name of the State of Pennsylvania.

2. In § 76.2, the reference to the State of Texas in paragraph (f) is deleted.

(Secs. 4-7, 23 Stat. 32, as amended, secs. 1 and 2, 32 Stat. 791-792, as amended, secs. 1-4, 33 Stat. 1264, 1265, as amended, sec. 1, 75 Stat. 481, secs. 3 and 11, 76 Stat. 130, 132; 21 U.S.C. 111, 112, 113, 114g, 115, 117, 120, 121, 123-126, 134b, 134f; 29 F.R. 16210, as amended)

Effective date. The foregoing amendments shall become effective upon issuance.

The amendments exclude a portion of Blair County, Pa. from the areas quarantined because of hog cholera. Therefore, the restrictions pertaining to the interstate movement of swine and swine products from or through quarantined areas as contained in 9 CFR Part 76, as amended, will not apply to the excluded area, but will continue to apply to the quarantined areas described in § 76.2(e). Further, the restrictions pertaining to the interstate movement of swine and swine products from nonquarantined areas contained in said Part 76 will apply to the excluded areas. No areas in Pennsylvania remain under the quarantine.

The amendments add Pennsylvania to the list of hog cholera eradication States in § 76.2(f), and the special provisions pertaining to the interstate movement of swine and swine products from or to such eradication States are applicable to Pennsylvania.

¹ The functions prescribed in Part 76 of Chapter I, 9 CFR, have been transferred from the Agricultural Research Service, U.S. Department of Agriculture, to the Animal and Plant Health Service of the Department (36 F.R. 20707).

The amendments delete Texas from the list of hog cholera eradication States in § 76.2(f), and the special provisions pertaining to the interstate movement of swine and swine products from or to such eradication States are no longer applicable to Texas.

Insofar as the amendments relieve certain restrictions presently imposed but no longer deemed necessary to prevent the spread of hog cholera, they must be made effective immediately to be of maximum benefit to affected persons. Insofar as they impose restrictions, they should be made effective promptly in order to prevent the spread of hog cholera. It does not appear that public participation in this rule making proceeding would make additional relevant information available to this Department. Accordingly, under the administrative procedure provisions in 5 U.S.C. 553, it is found upon good cause that notice and other public procedure with respect to the amendments are impracticable and unnecessary, and good cause is found for making them effective less than 30 days after publication in the FEDERAL REGISTER.

Done at Washington, D.C., this 19th day of November 1971.

G. H. WISE,
Acting Administrator,
Animal and Plant Health Service.

[FR Doc.71-17285 Filed 11-24-71;8:54 am]

[Docket No. 71-601]

PART 76—HOG CHOLERA AND OTHER COMMUNICABLE SWINE DISEASES

Areas Quarantined

Pursuant to provisions of the Act of May 29, 1884, as amended, the Act of February 2, 1903, as amended, the Act of March 3, 1905, as amended, the Act of September 6, 1961, and the Act of July 2, 1962 (21 U.S.C. 111-113, 114g, 115, 117, 120, 121, 123-126, 134b, 134f), Part 76, Title 9, Code of Federal Regulations, restricting the interstate movement of swine and certain products because of hog cholera and other communicable swine diseases, is hereby amended in the following respects:

In § 76.2, the introductory portion of paragraph (e) is amended by adding thereto the name of the State of New Jersey; paragraph (f) is amended by deleting the name of the State of New Jersey; and a new paragraph (e) (4) relating to the State of New Jersey is added to read:

§ 76.2 Notices relating to existence of hog cholera; prohibition of movement of any hog cholera virus, exceptions; spread of disease through raw garbage; regulations; quarantines; eradication States; and free States.

(e) * * * * *

(4) New Jersey. The adjacent portions of Burlington and Camden Counties

bounded by a line beginning at the junction of the New Jersey Turnpike and U.S. Highway 30 in Camden County; thence, following U.S. Highway 30 in a southeasterly direction to Secondary Road 534; thence, following Secondary Road 534 in a northeasterly direction to Secondary Road 541 in Burlington County; thence, following Secondary Road 541 in a northwesterly direction to State Highway 70; thence, following State Highway 70 in a northwesterly direction to the New Jersey Turnpike in Camden County; thence, following the New Jersey Turnpike in a southwesterly direction to its junction with U.S. Highway 30.

(Secs. 4-7, 23 Stat. 32, as amended, secs. 1 and 2, 32 Stat. 791-792, as amended, secs. 1-4, 33 Stat. 1264, 1265, as amended, sec. 1, 75 Stat. 481, secs. 3 and 11, 76 Stat. 130, 132; 21 U.S.C. 111-113, 114g, 115, 117, 120, 121, 123-126, 134b, 134f; 29 F.R. 16210, as amended)

Effective date. The foregoing amendment shall become effective upon issuance.

The amendment quarantines portions of Burlington and Camden Counties in New Jersey because of the existence of hog cholera. This action is deemed necessary to prevent further spread of the disease. The restrictions pertaining to the interstate movement of swine and swine products from or through quarantined areas as contained in 9 CFR Part 76, as amended, will apply to the quarantined portions of such counties.

The amendment deletes New Jersey from the list of hog cholera eradication States in § 76.2(f), and the special provisions pertaining to the interstate movement of swine and swine products from or to such eradication States are no longer applicable to New Jersey.

Insofar as the amendment imposes certain further restrictions necessary to prevent the interstate spread of hog cholera, it must be made effective immediately to accomplish its purpose in the public interest. Insofar as it relieves restrictions, it should be made effective promptly in order to be of maximum benefit to affected persons. It does not appear that public participation in this rule making proceeding would make additional relevant information available to this Department.

Accordingly, under the administrative procedure provisions in 5 U.S.C. 553, it is found upon good cause that notice and other public procedure with respect to the amendment are impracticable, unnecessary, and contrary to the public interest, and good cause is found for making it effective less than 30 days after publication in the FEDERAL REGISTER.

Done at Washington, D.C., this 19th day of November 1971.

G. H. WISE,
Acting Administrator,
Animal and Plant Health Service.

[FR Doc.71-17286 Filed 11-24-71;8:54 am]

PART 78—BRUCELLOSIS

Certificates Pertaining to Movement of Animals

Pursuant to the provisions of the Act of May 29, 1884, as amended, the Act of February 2, 1903, as amended, the Act of March 3, 1905, as amended, and the Act of July 2, 1962 (21 U.S.C. 111-113, 114a-1, 115, 117, 120, 121, 125, 134b, 134f), Part 78, Title 9, Code of Federal Regulations, is hereby amended in the following respects:

1. In § 78.1 paragraph (q) is amended and a new paragraph (x) is added, as follows:

§ 78.1 Definitions.

(q) *Certificate.* An official document issued by a State or Federal inspector or accredited veterinarian at the point of origin of a shipment of domestic animals to be moved under § 78.12, which shows the identification tag, tattoo, or registration number or similar identification of each animal to be moved, the number of animals covered by the document, the purpose for which the animals are to be moved, the points of origin and destination, the consignor, and the consignee, and which states that the animal or animals identified on the certificate meet the requirements of § 78.12.

(x) *Reactor certificate.* An official document issued by a State or Federal inspector or accredited veterinarian at the point of origin of a shipment of domestic animals to be moved under §§ 78.5-78.9 or of bison to be moved under § 78.18, which shows that the animals are reactors to a test for brucellosis recognized by the Secretary of Agriculture, the reactor tag number of each animal and the name of the owner of such animal when it was tested for brucellosis, the destination to which the reactors are to be moved, the purpose for which the reactors are to be moved, and that they are eligible for such movement under the applicable provisions of §§ 78.5-78.9 or § 78.18.

2. Section 78.3 is amended by adding the following new paragraph (d):

§ 78.3 Certificates pertaining to movement of animals.

(d) For the purposes of this section, the term "certificate" includes a reactor certificate as well as the certificate required for domestic animals under § 78.12 and the certificate required for bison under § 78.20.

3. Section 78.5(b) is amended to read:

§ 78.5 Movement of brucellosis reactors.

(b) The reactors shall be accompanied to destination, in accordance with § 78.3, by a reactor certificate.

(Secs. 4-7, 13, 23 Stat. 32, as amended including 65 Stat. 693, secs. 1, 2, 32 Stat. 791-792, as amended; sec. 5, 33 Stat. 1265, as amended; secs. 3, 11, 76 Stat. 130, 132; 21

U.S.C. 111-113, 114a-1, 115, 117, 120, 121, 125, 134b, 134f; 29 F.R. 16210, as amended)

The foregoing amendments clarify the regulations contained in Part 78 (9 CFR) by distinguishing the types of certificates required for interstate shipment of brucellosis test reactor animals, for non-reactor bison, and for other nonreactor animals under the regulations in Part 78. They do not impose additional requirements upon any person intending to ship animals interstate, and affected State officials concur in the changes made by the amendments. It does not appear that public participation in this rule making proceeding would make additional information available to this Department. The amendments should be made effective promptly to clarify the intent of the regulations. Therefore, under the administrative procedure provisions in 5 U.S.C. 553, it is found upon good cause that publication of a notice of rule making and other public participation in connection with these amendments are impracticable and unnecessary, and good cause is found for making them effective less than 30 days after publication thereof in the FEDERAL REGISTER.

Effective date. The foregoing amendments shall become effective upon publication in the FEDERAL REGISTER (11-25-71).

Done at Washington, D.C., this 19th day of November 1971.

G. H. WISE,
Acting Administrator,
Animal and Plant Health Service.

[FR Doc. 71-17287 Filed 11-24-71; 8:54 am]

Title 14—AERONAUTICS AND SPACE

Chapter I—Federal Aviation Administration, Department of Transportation

[Docket No. 10276; Amdt. 39-1349]

PART 39—AIRWORTHINESS DIRECTIVES

British Aircraft Corp. Model BAC 1-11, 200 and 400 Series Airplanes

Amendment 39-1073 (35 F.R. 13879), AD 70-18-1, as amended by Amendment 39-1184 (36 F.R. 5976), requires periodic inspection of the flap-beam bracket attachment bolts through the wing lower skin at certain flap-beam locations on BAC 1-11, 200 and 400 series airplanes. If loose or failed bolts are found, AD 70-18-1 requires inspection, and repair as necessary, of the brackets, horizontal bolts, and the wing structure at affected flap-beam locations. AD 70-18-1 permits the inspections at a flap-beam location to be discontinued when the defective bolts are replaced in accordance with BAC 1-11 Alert Service Bulletin No. 57-A-PM4407, or when all the bolts are re-

placed in accordance with BAC 1-11 Service Bulletin No. 57-PM4407 or No. 57-PM4790(c). AD 70-18-1 also permits, under certain conditions, the adoption of interim measures, which permit an additional 300 landings prior to the required replacement without further inspection of brackets, horizontal bolts, or wing structure at affected flap-beam locations.

Subsequent to the issuance of Amendment 39-1184 (amending AD 70-18-1), the FAA has received reports of further failures of the flap-beam bracket attachment bolts and, based on further investigation, the FAA has determined that the inspections at a flap-beam location may not be discontinued unless all the bolts at the flap-beam location are replaced in accordance with Service Bulletin No. 57-PM4790(c), or in the cases of flap-beam locations 2 and 3, if BAC Modification PM3065, part (b) or (d), as applicable, has been installed. If increased diameter taper bolts have been installed in accordance with paragraph (h) (1) of AD 70-18-1 (Service Bulletin No. 57-PM4407), this AD requires their inspection. If high tensile strength bolts have been installed in accordance with paragraph (h) (2) of AD 70-18-1 (Service Bulletin No. 57-A-PM4407), this AD requires all the bolts at the affected flap-beam location be replaced within the next 300 landings and to be inspected pending replacement. The FAA has also determined that the interim measures provided in AD 70-18-1 may still be used. However, if the interim measures are adopted, the horizontal bolts and the wing structure at the affected location must be inspected for loose or failed horizontal bolts and for fuel leaks and damage to the wing structure, and any necessary corrective action accomplished, at the time the flap-beam attachment bracket bolts are replaced.

Therefore, Amendment 39-1073 (AD 70-18-1), as amended by Amendment 39-1184 is being superseded by this new AD that includes the requirements of AD 70-18-1 that are still applicable and the new requirements which the FAA has determined are necessary in view of the failure of additional flap-beam bracket attachment bolts since the issuance of AD 70-18-1.

There have also been reports of cracks in the flap-beam attachment brackets, and the FAA is issuing, concurrently with this AD, an AD applicable to the attachment brackets. Accomplishment of the modifications provided in that AD will satisfy the requirements of this AD for that location.

In view of the possible seriousness of failures of the flap-beam bracket attachments on BAC Model 1-11, 200 and 400 series airplanes, a situation exists that requires immediate adoption of this regulation, and it is found that notice and public procedure hereon are impractical and good cause exists for making this amendment effective in less than 30 days.

In consideration of the foregoing, and pursuant to the authority delegated to me by the Administrator (14 CFR

11.89) § 39.13 of Part 39 of the Federal Aviation Regulations is amended by adding the following new Airworthiness Directive:

BRITISH AIRCRAFT CORP. Applies to Model BAC 1-11, 200 and 400 series airplanes.

Compliance is required as indicated.

To prevent failures of the flap-beam bracket to wing attachments due to loose or failed attachment bolts through the wing lower skin at flap-beam locations 2, 3, and 4, accomplish the following:

(a) For 200 and 400 series airplanes which do not have parallel shank bolts installed in accordance with paragraph (h)(2) of AD 70-18-1 or do not have BAC Modification PM3065(b), PM4407, Part A5 or A6, or PM4790 (c) incorporated, at flap-beam locations 2 (both L.H. and R.H.), within the next 50 landings after the effective date of this AD, unless already accomplished within the last 450 landings, and thereafter at intervals not to exceed 500 landings from the last inspection, inspect the six flap-beam bracket attachment bolts through the wing lower skin at each affected flap-beam location 2 for looseness or failure in accordance with paragraph (h).

(b) For 200 series airplanes which do not have parallel shank bolts installed in accordance with paragraph (h)(2) of AD 70-18-1 or do not have BAC Modification PM3065(d), PM4407, Part A7 or A8, or PM4790(c) incorporated, at flap-beam locations 3 (both L.H. and R.H.), within the next 50 landings after the effective date of this AD, unless already accomplished within the last 950 landings, and thereafter at intervals not to exceed 1,000 landings from the last inspection, inspect the four flap-beam bracket attachment bolts through the wing lower skin at each affected flap-beam location 3 for looseness or failure in accordance with paragraph (h).

(c) For 200 series airplanes which do not have parallel shank bolts installed in accordance with paragraph (h)(2) of AD 70-18-1 or do not have BAC Modification PM3216, PM4407, Part A11 or A12, or PM4790 (c) incorporated, at flap-beam locations 4 (both L.H. and R.H.), within the next 50 landings after the effective date of this AD, unless already accomplished within the last 950 landings, and thereafter at intervals not to exceed 1,000 landings from the last inspection, inspect the four flap-beam bracket attachment bolts through the wing lower skin at each affected flap-beam location 4 for looseness or failure in accordance with paragraph (h).

NOTE: An inspection accomplished at a flap-beam location in accordance with paragraph (a), (b), or (c) of AD 70-18-1 prior to the effective date of this AD may be considered to meet the initial inspection required by paragraph (a), (b), or (c), respectively, of this AD.

(d) For 200 and 400 series airplanes which have an applicable Part A5, A6, A7, A8, A9, A10, A11, or A12 of BAC Modification PM4407, or PM3216 incorporated at flap-beam locations 2, 3, or 4 (both L.H. and R.H.), within the next 50 landings after the effective date of this AD or before the accumulation of 450 landings after incorporating BAC Modification PM3216 or PM4407 at an affected flap-beam location, whichever occurs later, and thereafter at intervals not to exceed 500 landings from the last inspection, inspect the flap-beam bracket attachment bolts through the wing lower skin at each affected flap-beam location for looseness or failure in accordance with paragraph (h).

(e) If failed or loose bolts through the wing lower skin are found during an inspection required by paragraph (a), (b), (c), or (d) comply with subparagraph (1), (2), or (3).

(1) If more than one failed or loose bolt are found on any bracket, before further flight, except that the airplane may be flown in accordance with FAR 21.197 to a base where the repairs or modifications can be performed, comply with paragraphs (i), (j), and (k).

(2) If no more than one failed or loose bolt on each bracket at any flap-beam location is found, before further flight, except that the airplane may be flown in accordance with FAR 21.197 to a base where the repairs or modifications can be performed, comply with paragraphs (i) and (j) and either:

(i) Comply with paragraph (k); or

(ii) Replace each failed or loose bolt with a new taper bolt of the same part number or with a parallel shank bolt having a material strength of 140,000 to 165,000 p.s.i. and having a diameter compatible with the maximum diameter of the replaced taper bolt and within the next 300 landings after replacing the failed or loose bolt comply with paragraphs (i), (j), and (k).

(3) If no failed bolt and no more than one loose bolt is found at any flap-beam location, before further flight, except that the airplane may be flown in accordance with FAR 21.197 to a base where the repairs or modifications can be performed, comply with paragraphs (i) and (j) and either:

(i) Comply with paragraph (k); or

(ii) Leave the loose bolt in service and within the next 300 landings after finding the loose bolt comply with paragraphs (i), (j), and (k).

(f) For 200 and 400 series airplanes which have any parallel shank bolts installed at a flap-beam location as a repair for any failed or loose flap-beam bracket attachment bolts through the wing lower skin in accordance with paragraph (h)(2) of AD 70-18-1, comply with the following:

(1) At each affected flap-beam location inspect all the flap-beam bracket attachment bolts through the wing lower skin for failure or looseness in accordance with paragraph (h) as indicated below:

(i) For airplanes with 1,200 or more landings on an affected flap-beam location since the installation of the parallel shank bolts, within the next 25 landings after the effective date of this AD unless already accomplished within the last 25 landings, and thereafter at intervals not to exceed 50 landings from the last inspection until paragraph (k) is complied with.

(ii) For airplanes with 900 or more but less than 1,200 landings on an affected flap-beam location since the installation of the parallel shank bolts, within the next 50 landings after the effective date of this AD unless already accomplished within the last 50 landings, and thereafter at intervals not to exceed 100 landings from the last inspection until paragraph (k) is complied with.

(iii) For airplanes with less than 900 landings on an affected flap-beam location since the installation of the parallel shank bolts, within the next 50 landings after the effective date of this AD unless already accomplished with the last 250 landings, or before the accumulation of 300 landings on the affected flap-beam location, whichever occurs later.

(2) If any failed or loose bolts are found during an inspection required by this paragraph before further flight comply with paragraphs (i), (j), and (k).

(3) Within the next 300 landings after the effective date of this AD comply with paragraphs (i), (j), and (k) at each affected flap-beam location.

(g) For 200 and 400 series airplanes, at those flap-beam locations 2, 3, or 4 at which replacement bolts were installed or loose bolts were left in service as provided by

paragraphs (d) (1) and (f) (2) of AD 70-18-1, as amended, comply with the following:

(1) For flap-beam locations at which a loose bolt or replacement bolt is still in service, before the accumulation of 300 landings on the loose bolt or replacement bolt comply with paragraphs (i), (j), and (k).

(2) For flap-beam locations at which a loose bolt or replacement bolt has been removed from service through modifications performed in accordance with paragraph (h) of AD 70-18-1, comply with paragraphs (i) and (j), unless already accomplished at the time of such modification or subsequent thereto, as indicated below:

(i) For flap-beam locations modified in accordance with paragraph (h)(1) of AD 70-18-1, at the first inspection required by paragraph (d).

(ii) For flap-beam locations modified in accordance with paragraph (h)(2) of AD 70-18-1, at the first inspection required by paragraph (f).

(iii) For flap-beam locations modified in accordance with paragraph (h)(3) of AD 70-18-1, within the next 100 landings after the effective date of this AD.

(h) Inspect the flap-beam bracket attachment bolts through the wing lower skin for failure or looseness by applying a load to the nut on each bolt to insure that the bolt has not failed or is not loose.

NOTE: The inspection for security of the taper bolts cannot be adequately carried out at the bolt head because the shallow taper might maintain the bolt shank tight in spite of failure at the thread undercut.

(i) At each affected flap-beam location accomplish the following:

(1) Visually inspect the two lower horizontal attachment bolts (one on each side of the flange) which pass through the forward flange of the flap-beam attachment bracket and the rear spar lower boom angle for failure or looseness.

(2) Visually inspect the wing structure in the area of the affected flap-beam location for damage or fuel leaks.

(3) If any failed or loose horizontal bolts or any damage to the wing structure or any fuel leaks are found during an inspection required by this paragraph, before further flight except that the airplane may be flown in accordance with FAR 21.197 to a base where the repairs can be performed, replace the failed or loose horizontal bolts, repair the damage to the wing structure, and seal the fuel leaks.

(j) At each affected flap-beam location accomplish the following:

(1) Visually inspect both flap-beam attachment brackets for cracks in the webs or flanges.

NOTE: Particular attention should be given to type A and type B cracks as shown in figure 1 of British Aircraft Corp. Service Newsletter 57/7, Issue 1, dated April 27, 1970.

(2) If a crack is found during an inspection required by this paragraph, before further flight, except that the airplane may be flown in accordance with FAR 21.197 to a base where the repairs can be performed, comply with ARB-approved instructions from the service manager, British Aircraft Corp., Weybridge, Surrey, England, or an FAA-approved equivalent.

(k) At each affected flap-beam location replace all the flap-beam bracket attachment bolts through the wing lower skin with new increased diameter BAC Modification PM4790(c) parallel shank bolts in accordance with Part C of British Aircraft Corp. Model BAC 1-11 Service Bulletin No. 57-PM4790 dated March 1, 1971, or an FAA-approved equivalent.

(l) The repetitive inspection required by this AD may be discontinued at each flap-beam location where the modifications specified by paragraph (k) have been incorporated.

NOTE: These modifications may be accomplished in complying with Amendment 39-1348.

(m) For the purpose of complying with this AD, subject to acceptance by the assigned FAA maintenance inspector, the number of landings may be determined by dividing each airplane's hours' time in service by the operator's fleet average time from takeoff to landing for BAC 1-11, 200 and 400 series airplanes.

(n) Upon request of the operator, an FAA maintenance inspector, subject to prior approval of the Chief, Aircraft Certification Staff, FAA Europe, Africa and Middle East region may adjust the repetitive inspection intervals specified in paragraphs (a), (b), (c), and (d) of this AD to permit compliance at an established inspection period of the operator if the request contains substantiating data to justify the increase for that operator.

This amendment supersedes Amendment 39-1073 (35 F.R. 13879), AD 70-18-1, as amended by Amendment 39-1184 (36 F.R. 5976).

This amendment becomes effective November 30, 1971.

(Secs. 313(a), 601, 603, Federal Aviation Act of 1958, 49 U.S.C. 1354(a), 1421, 1423; sec. 6(e), Department of Transportation Act, 49 U.S.C. 1655(c))

Issued in Washington, D.C., on November 18, 1971.

R. S. SLIFF,
Acting Director,
Flight Standards Service.

[FR Doc.71-17177 Filed 11-24-71;8:46 am]

[Docket No. 11562; Amdt. 39-1348]

PART 39—AIRWORTHINESS DIRECTIVES

British Aircraft Corporation Model BAC 1-11, 200 and 400 Series Airplanes

There have been reports of cracks in the flap-beam attachment brackets at flap-beam locations 2, 3, and 4 that could result in flap malfunctions on British Aircraft Corp. Model BAC 1-11, 200 and 400 series airplanes. In some cases the related flap-beam bracket attachment bolts through the wing lower skin were loose or failed while in other cases the bolts were secure. Since these conditions are likely to exist or develop in other airplanes of the same type design, an Airworthiness Directive is being issued to require periodic visual inspection of the flap-beam attachment brackets for cracks at flap-beam locations which do not have improved brackets installed (improved brackets are provided by Modifications PM4948 and 3065, parts (a) and (c), as covered by BAC 1-11 Alert Service Bulletin No. 57-A-PM4948 for field installation, or by Modification PM3065, parts (b) and (d), which are production modifications) and the replacement of brackets with cracks that exceed the allowable length with an improved bracket. Proper load distribution requires that both brackets at a flap-

beam location be replaced with improved brackets. In addition, the AD requires brackets with cracks that do not exceed the allowable length to be repaired or inspected at more frequent intervals.

In view of the possible seriousness of failures of the flap-beam attachment brackets, a situation exists that requires immediate adoption of this rule and it is found that notice and public procedure hereon are impractical and good cause exists for making this amendment effective in less than 30 days.

In consideration of the foregoing, and pursuant to the authority delegated to me by the Administrator (14 CFR 11.89), § 39.13 of Part 39 of the Federal Aviation Regulations is amended by adding the following new Airworthiness Directive:

BRITISH AIRCRAFT CORP. Applies to Model BAC 1-11, 200 and 400 series airplanes that have not been modified to incorporate BAC Modification PM3065, at all flap-beam locations 2 and 3, and BAC Modification PM4948 at all flap-beam locations 4.

Compliance is required as indicated. To prevent possible failures of flap-beam attachment brackets at flap-beam locations 2 (Rib 6), 3 (Rib 11), and 4 (Rib 15); accomplish the following:

(a) At flap-beam locations 4 (L.H.) that do not incorporate British Aircraft Corp. Modification PM4948, part (a), and at flap-beam locations 4 (R.H.) that do not incorporate Modification PM4948, part (b), inspect the flap-beam attachment brackets for cracks in accordance with paragraph (c):

(1) For 200 series airplanes, within the next 50 landings after the effective date of this AD, or before the accumulation of 10,000 landings, whichever occurs later, unless already accomplished within the last 800 landings, and thereafter at intervals not to exceed 850 landings from the last inspection.

(2) For 400 series airplanes, within the next 50 landings after the effective date of this AD, or before the accumulation of 8,000 landings, whichever occurs later, unless already accomplished within the last 800 landings, and thereafter at intervals not to exceed 850 landings from the last inspection.

(b) At flap-beam locations 2 (both L.H. and R.H.) that do not incorporate British Aircraft Corp. Modification PM3065, part (a) or (b), and at flap-beam locations 3 (both L.H. and R.H.) that do not incorporate Modification PM3065, part (c) or (d), inspect the flap-beam attachment brackets for cracks in accordance with paragraph (c):

(1) For 200 series airplanes, within the next 50 landings after the effective date of this AD, or before the accumulation of 15,000 landings, whichever occurs later, unless already accomplished within the last 800 landings, and thereafter at intervals not to exceed 850 landings from the last inspection.

(2) For 400 series airplanes, within the next 50 landings after the effective date of this AD, or before the accumulation of 12,000 landings, whichever occurs later, unless already accomplished within the last 800 landings, and thereafter at intervals not to exceed 850 landings from the last inspection.

(c) Visually inspect the flap-beam attachment brackets for cracks in accordance with paragraphs 2.1.1 (flap-beam locations 4), 2.2.1 (flap-beam locations 3), or 2.3.1 (flap-beam locations 2) of British Aircraft Corp. Model BAC 1-11 Alert Service Bulletin No. 57-A-PM 4948, Issue 1, dated June 14, 1971, or an FAA-approved equivalent.

(d) If cracks that do not exceed the "allowable length" limits specified in table 1

of British Aircraft Corp. Model BAC 1-11 Alert Service Bulletin No. 57-A-PM4948, Issue 1, dated June 14, 1971, or an FAA-approved equivalent, are found during an inspection required by this AD, inspect the flap-beam attachment brackets at the affected flap-beam location in accordance with paragraph (c) at intervals not to exceed 200 landings from the last inspection, until the bracket is repaired in accordance with paragraph (e) or modified in accordance with paragraph (g).

(e) Repair brackets having cracks that do not exceed the "allowable length" limits specified in table 1 of British Aircraft Corp. Model BAC 1-11 Alert Service Bulletin No. 57-A-PM4948, Issue 1, dated June 14, 1971 or an FAA-approved equivalent, in accordance with the "salvage action" specified in table 2 of that Alert Service Bulletin, or an FAA-approved equivalent, and thereafter inspect the affected flap-beam location for cracks in accordance with paragraph (c) at intervals not to exceed 850 landings from the last inspection.

(f) If cracks which exceed the "allowable length" limits specified in table 1 of British Aircraft Corp. Model BAC 1-11 Alert Service Bulletin No. 57-A-PM4948, Issue 1, dated June 14, 1971, or FAA-approved equivalent, are found during an inspection required by this AD, before further flight, except that the airplane may be flown in accordance with PAR 21.197 to a base where the repairs can be performed, comply with paragraph (g).

(g) Replace both brackets at an affected flap-beam location with improved brackets in accordance with British Aircraft Corp. Model BAC 1-11 Alert Service Bulletin No. 57-A-PM4948, Issue 1, dated June 14, 1971, or an FAA-approved equivalent, as follows:

Flap-beam location	Replacement bracket modification standard
No. 2 (Rib 6)—R.H. or L.H.	PM 3065, part (a).
No. 3 (Rib 11)—R.H. or L.H.	PM 3065, part (c).
No. 4 (Rib 15)—L.H.	PM 4948, part (a).
No. 4 (Rib 15)—R.H.	PM 4948, part (b).

(h) The repetitive inspections required by this AD may be discontinued at each flap-beam location that has been modified in accordance with paragraph (g).

(i) For the purpose of complying with this AD, subject to acceptance by the assigned FAA maintenance inspector, the number of landings may be determined by dividing each airplane's hours' time in service by the operator's fleet average time from takeoff to landing.

(j) Upon request of an operator, an FAA maintenance inspector, subject to prior approval by the Chief, Aircraft Certification Staff, FAA Europe, Africa and Middle East region may adjust the repetitive inspection interval specified in paragraphs (a) and (b) of this AD to permit compliance at an established inspection period of the operator if the request contains substantiating data to justify the increase for that operator.

This amendment becomes effective November 30, 1971.

(Secs. 313(a), 601, 603, Federal Aviation Act of 1958, 49 U.S.C. 1354(a), 1421, 1423; sec. 6(e), Department of Transportation Act, 49 U.S.C. 1655(c))

Issued in Washington, D.C., on November 18, 1971.

R. S. SLIFF,
Acting Director,
Flight Standards Service.

[FR Doc.71-17178 Filed 11-24-71;8:46 am]

[Docket No. 71-CE-24-AD; Amdt. 39-1345]

PART 39—AIRWORTHINESS DIRECTIVES**Cessna Model 210D Airplanes**

A proposal to amend Part 39 of the Federal Aviation Regulations to include an Airworthiness Directive requiring within the next 150 hours' time in service after its effective date, installation of Cessna Kits 1209005-1 R/L in accordance with Cessna Service Letter No. 69-17, dated September 16, 1969, on Cessna Model 210D airplanes, Serial Nos. 21058221 through 21058460, was published in the FEDERAL REGISTER on October 7, 1971 (36 F.R. 19507).

Interested persons have been afforded an opportunity to participate in the making of the amendment. The one comment received was from the manufacturer who objected to the proposal apparently on the ground that the 239 Cessna Model 210D airplanes affected by the service letter would comply with it voluntarily. However, the manufacturer's own records only indicate that 119 of the affected aircraft have complied with the service letter. Since there have been a number of reports of main-gear actuator malfunctions on unmodified aircraft, the FAA believes that sufficient justification exists for issuing an AD making compliance with the service letter mandatory. The manufacturer suggested, and the agency agrees, that relief be provided those operators who have already complied with the service letter by adding the phrase "Unless already accomplished" to the AD. Consequently, the AD will be modified accordingly.

Since the aforementioned change to the original proposal is relaxatory in nature, it imposes no additional burden on any person with the consequence that further notice and public procedure hereon are unnecessary.

In consideration of the foregoing, and pursuant to the authority delegated to me by the Administrator (31 F.R. 13697), § 39.13 of the Federal Aviation Regulations is amended by adding the following new AD:

CESNA. Applies to Model 210D (Serial Nos. 21058221 through 21058460) airplanes.

To decrease the possibility of main-gear extension failure:

Unless already accomplished, within the next 150 hours' time in service after the effective date of this AD, install Cessna Kits 1209005-1 R/L in accordance with Cessna Service Letter 69-17 dated September 16, 1969, or an equivalent approved by the Chief, Engineering and Manufacturing Branch, FAA, Central Region.

This amendment becomes effective November 27, 1971.

(Secs. 313(a), 601, 603, Federal Aviation Act of 1958, 49 U.S.C. 1354(a), 1421, 1423; sec. 6(e), Department of Transportation Act, 49 U.S.C. 1655(c))

Issued in Kansas City, Mo., on November 16, 1971.

JOHN M. CYROCKI,
Director, Central Region.

[FR Doc.71-17179 Filed 11-24-71; 8:46 am]

[Docket No. 71-EA-150, Amdt. 39-1343]

PART 39—AIRWORTHINESS DIRECTIVES**Fairchild Hiller Aircraft**

The Federal Aviation Administration is amending § 39.13 of the Federal Aviation Regulations so as to issue an Airworthiness Directive applicable to Fairchild Hiller FH1100 type helicopters.

There have been reports of cracks in the landing gear torque tubes of the FH1100 helicopters. These cracks apparently stem from the fact that the attachment bolt has been subject to over-torquing. Since this deficiency can exist or develop in other aircraft of similar type design, an Airworthiness Directive is being issued requiring a periodic visual inspection of the torque tubes.

The foregoing requires expeditious adoption of this amendment as a cracked torque tube could seriously weaken the landing gear. Therefore, notice and public procedure hereon are impractical and the rule may be made effective in less than 30 days.

In consideration of the foregoing and pursuant to the authority delegated to me by the Administrator, 14 CFR 11.89 (31 F.R. 13697) § 39.13 of the Federal Aviation Regulations is amended by adding the following new Airworthiness Directive:

FAIRCHILD HILLER AIRCRAFT. Applies to FH1100 type helicopters certificated in all categories.

Compliance required as indicated.

To preclude failure of the landing gear torque tube P/N 24-43041 at the skid support attachments accomplish the following:

a. Within the next 50 hours in service after the effective date of this AD, unless already accomplished within the last 50 hours in service, inspect, and replace if necessary, torque tube P/N 24-43041 in accordance with paragraphs 1 and 2 of Fairchild Hiller Service Letter No. SL FH1100-43-1 dated October 5, 1971, or later FAA-approved revision, or an alternate method approved by the Chief, Engineering and Manufacturing Branch, FAA, Eastern Region.

b. Within 100 hours in service after the inspection required by paragraph a and every 100 hours in service thereafter, inspect and replace if necessary torque tube P/N 24-43041 in accordance with paragraph 2 of Fairchild Hiller Service Letter SL FH1100-43-1, dated October 5, 1971 or later FAA-approved revision, or an alternate method approved by the Chief, Engineering and Manufacturing Branch, FAA, Eastern Region.

This amendment is effective November 30, 1971.

(Secs. 313(a), 601, 603, Federal Aviation Act of 1958, 49 U.S.C. 1354(a), 1421, 1423; sec. 6(e), Department of Transportation Act, 49 U.S.C. 1655(c))

Issued in Jamaica, N.Y., on November 16, 1971.

ROBERT H. STANTON,
Acting Director, Eastern Region.

[FR Doc.71-17180 Filed 11-24-71; 8:46 am]

[Docket No. 71-EA-156; Amdt. 39-1344]

PART 39—AIRWORTHINESS DIRECTIVES**Piper Aircraft**

The Federal Aviation Administration is amending § 39.13 of the Federal Aviation Regulations so as to amend AD 70-22-5 applicable to Piper PA-23, PA-30 and PA-31 type aircraft.

Since the issuance of AD 70-22-5 there have appeared a few instances in which PA-23 aircraft which did not fall within the range of serial numbers set forth in the airworthiness directive were nevertheless altered. The reason appears to be a misreading of the applicability statement. Therefore the statement is being amended to stipulate the PA-23 type aircraft involved by serial number.

Since the amendment is for clarification purposes, notice and public procedure hereon are unnecessary and the amendment may be made effective in less than 30 days.

In consideration of the foregoing and pursuant to the authority delegated to me by the Administrator, 14 CFR 11.89 (31 F.R. 13697), § 39.13 of the Federal Aviation Regulations is amended by amending AD 70-22-5 as follows:

1. Delete in the applicability statement the words and numbers "Model PA 23-250 and PA-E23-250 (Six Place) S/Nos. 27-3837, 27-3944. To 27-4442 Incl." and insert in lieu thereof "Piper PA 23-250 type aircraft S/N 27-3837 and 27-3944 to 27-4442 incl."

This amendment is effective November 30, 1971.

(Secs. 313(a), 601, 603, Federal Aviation Act of 1958, 49 U.S.C. 1354(a), 1421, 1423; sec. 6(e), Department of Transportation Act, 49 U.S.C. 1655(c))

Issued in Jamaica, N.Y., on November 16, 1971.

ROBERT H. STANTON,
Acting Director, Eastern Region.

[FR Doc.71-17181 Filed 11-24-71; 8:46 am]

[Airspace Docket No. 71-WE-34]

PART 71—DESIGNATION OF FEDERAL AIRWAYS, AREA LOW ROUTES, CONTROLLED AIRSPACE, AND REPORTING POINTS**Alteration and Extension of VOR Federal Airway Segments**

On September 16, 1971, a notice of proposed rule making was published in the FEDERAL REGISTER (36 F.R. 18533) stating that the Federal Aviation Administration (FAA) was considering amendments to Part 71 of the Federal Aviation Regulations that would extend VOR Federal Airway No. 94 from Gila Bend, Ariz., to Blythe, Calif., and alter VOR Federal Airway No. 105 segment between Tucson, Ariz., and Casa Grande, Ariz.

Interested persons were afforded an opportunity to participate in the proposed rule making through the submission of comments. All comments received were favorable.

In consideration of the foregoing, Part 71 of the Federal Aviation regulations is amended effective 0901 G.m.t., February 3, 1972, as hereinafter set forth.

Section 71.123 (36 F.R. 2010, 3892) is amended as follows:

1. In V-94 "From Gila Bend, Ariz., is deleted and "From Blythe, Calif.; INT Blythe 094" and Gila Bend, Ariz., 299" radials; Gila Bend;" is substituted therefor.

2. In V-105 "INT Tucson 273" and Casa Grande, Ariz., 158" radials;" is deleted and "INT Tucson 298" and Casa Grande, Ariz., 145" radials;" is substituted therefor.

(Sec. 307(a), Federal Aviation Act of 1958, 49 U.S.C. 1348(a); sec. 6(c), Department of Transportation Act, 49 U.S.C. 1655(c))

Issued in Washington, D.C., on November 18, 1971.

H. B. HELSTROM,
Chief, Airspace and Air
Traffic Rules Division.

[FR Doc.71-17173 Filed 11-24-71; 8:45 am]

[Airspace Docket No. 71-SO-171]

PART 71—DESIGNATION OF FEDERAL AIRWAYS, AREA LOW ROUTES, CONTROLLED AIRSPACE, AND REPORTING POINTS

Alteration of Transition Area

The purpose of this amendment to Part 71 of the Federal Aviation regulations is to alter the Cincinnati, Ohio, transition area.

The Cincinnati transition area is described in § 71.181 (36 F.R. 2140 and 14636). In the description, an extension is predicated on Runway 18 ILS localizer north course. Effective December 16, 1971, the ILS Runway 18 Instrument Approach Procedure turn altitude will be raised to 2,500 feet MSL, thus deleting the requirement for this extension. It is necessary to alter the description to reflect this change. Since this amendment lessens the burden on the public, notice and public procedure hereon are unnecessary.

In consideration of the foregoing, Part 71 of the Federal Aviation regulations is amended, effective 0901 G.m.t., December 16, 1971, as hereinafter set forth.

In § 71.181 (36 F.R. 2140), the Cincinnati, Ohio, transition area (36 F.R. 14636) is amended as follows:

"* * * within 9.5 miles W. and 4.5 miles E. of Runway 18 ILS localizer N. course, extending from the 11.5-mile radius area to 18.5 miles N. of the LOM * * *" is deleted.

(Sec. 307(a), Federal Aviation Act of 1958 (49 U.S.C. 1348(a); sec. 6(c), Department of Transportation Act, 49 U.S.C. 1655(c))

Issued in East Point, Ga., on November 16, 1971.

JAMES G. ROGERS,
Director, Southern Region.

[FR Doc.71-17175 Filed 11-24-71; 8:46 am]

[Airspace Docket No. 71-SW-67]

PART 71—DESIGNATION OF FEDERAL AIRWAYS, AREA LOW ROUTES, CONTROLLED AIRSPACE, AND REPORTING POINTS

Alteration of Transition Area

The purpose of this amendment to Part 71 of the Federal Aviation Regulations is to alter the Winnsboro, Tex., transition area.

The present description of the Winnsboro, Tex., transition area includes an extension based on utilization of the Quitman, Tex., VOR 054° (046° magnetic) radial. Subsequent computations and additional flight checks indicated that the Quitman VOR 052° radial would afford a more suitable final approach course.

Action is being taken herein to change the airspace description to indicate use of the VOR 052° radial rather than the 054° radial. As the extent of airspace will not be increased and the airspace affected is minor, notice and public procedures are considered unnecessary and the amendment may be effective immediately.

In consideration of the foregoing, Part 71 of the Federal Aviation regulations is amended, effective immediately, as herein set forth.

In § 71.181 (36 F.R. 2140), the Winnsboro, Tex., transition area is amended by deleting "054° radial" and substituting "052° radial" therefor. Additionally, as the Quitman, Tex., VOR navigational facility is being converted to a VORTAC facility and is scheduled for completion by November 15, 1971, "VOR" should be deleted and "VORTAC" should be substituted therefor wherever it appears.

(Sec. 307(a), Federal Aviation Act of 1958, 49 U.S.C. 1348; sec. 6(c), Department of Transportation Act, 49 U.S.C. 1655(c))

Issued in Fort Worth, Tex., on November 16, 1971.

R. V. REYNOLDS,
Acting Director, Southwest Region.

[FR Doc.71-17174 Filed 11-24-71; 8:46 am]

Title 18—CONSERVATION OF POWER AND WATER RESOURCES

Chapter I—Federal Power Commission

[Docket No. R-427; Order 437A]

PART 2—GENERAL POLICY AND INTERPRETATIONS

Amended Statement of Policy and Order

NOVEMBER 16, 1971.

Statement of Policy Implementing the Economic Stabilization Act of 1970 (Public Law 91-379, 84 Stat. 799, as amended by Public Law 92-15, 85 Stat. 38) and

Executive Orders Nos. 11615 and 11627, Docket No. R-427.

The Commission reaffirms its Statement of Policy promulgated in its Order No. 437, issued August 18, 1971, and effective August 15, 1971 (36 F.R. 16902, August 26, 1971) particularly with regard to its commitment to implement the Economic Stabilization Act of 1970, as amended, Executive Order No. 11615, and all other statutes vesting legal authority in this Commission, including such regulations, definitions, orders, exceptions and exemptions as may be issued in the future by the President, the Cost of Living Council or their legal delegates.

The Commission notes the promulgation on October 15, 1971, of Executive Order 11627 (36 F.R. 20139, October 16, 1971), further providing for the stabilization of the economy.

The Commission notes the sixth amendment to OEP Economic Stabilization Regulation No. 1, dated November 12, 1971 (36 F.R. 21761, November 13, 1971), continuing said regulation in full force and effect.

The Commission notes the promulgation, effective November 14, 1971, of: Part 101—Coverage, Exemptions and Classification of Economic Units, to Chapter I—Cost of Living Council, in Title 6—Economic Stabilization, of the Code of Federal Regulations; Chapter II—Pay Board, and Part 201—Stabilization of Wages and Salaries, to Title 6 of the Code of Federal Regulations; and Chapter III—Price Commission and Part 300—Price and Rent Stabilization to Title 6 of the Code of Federal Regulations, all set out at 36 F.R. 21788, November 13, 1971.

In particular, the Commission notes the provisions of 6 CFR 300.016, relating to regulated public utilities which provide in paragraph (a) that "a person which is a regulated public utility * * * may charge a price, rate, or tariff in excess of the base price if such increase has been approved by a regulatory agency", and in paragraph (b) that "in the case of rate increases which were approved by a regulatory agency before November 14, 1971, but which were not permitted to take effect due to Executive Order 11615," such rate increases may take effect "with respect to transactions occurring after November 13, 1971" provided that "before such increases may take effect, such regulatory agency shall review such increases with regard to their consistency with the purposes of the Economic Stabilization Act of 1970, as amended."

The objectives of the Economic Stabilization Act of 1970, as articulated by the Congress, include inflation control and the creation of conditions necessary to provide healthy economic growth. These objectives are consistent with the regulatory standards enunciated by Congress in the Federal Power Act and the Natural Gas Act which require the Commission, among other things, to determine whether the rates established or

proposed to be established by public utilities and natural gas companies are just and reasonable. In discharging these statutory objectives through the regulatory process, the Commission's regulatory purposes are consonant with the objectives and purposes of the Economic Stabilization Act, as amended.

Taking cognizance of these developments, the Commission is of the opinion that this amendment of its original Statement of Policy, Order No. 437, is in the public interest. The Commission also reaffirms that this Statement of Policy may be amended from time to time as circumstances may require.

The Commission finds: (1) The notice and hearing requirements of 5 U.S.C. 553 do not apply to this general Statement of Policy as herein amended.

(2) In addition, compliance with the notice, public procedure, and effective date provisions of 5 U.S.C. 553 is impracticable and contrary to the public interest.

(3) Good cause exists that the amendments herein ordered shall become effective as of 12:01 a.m., November 14, 1971.

(4) Amendment of the Commission's Statement of Policy as promulgated by Order No. 437, issued August 18, 1971, and effective August 15, 1971 (36 F.R. 16902, August 26, 1971) is necessitated by: (a) The need to continue an economic program of wage and price restraints to achieve the goals outlined by the President in Executive Order 11627; (b) supersession of Executive Order 11615, as amended, by Executive Order 11627; (c) the provisions of Executive Order 11627 and the recently promulgated economic stabilization regulations set out in Title 6 of the Code of Federal Regulations implementing Phase II of the economic stabilization program, particularly those regulations in Title 6 relating to Chapter I—Cost of Living Council, Part 101—Coverage, Exemptions and Classification; and Chapter III—Price Commission, Part 300—Price and Rent Stabilization, including § 300.016 therein entitled "Regulated public utilities."

(5) The purposes of the Economic Stabilization Act of 1970 are consistent with the regulatory standards contained in the Federal Power Act and the Natural Gas Act and with Commission implementation and application of these standards in regulatory proceedings.

(6) It is appropriate and in the public interest in administering the Federal Power Act and the Natural Gas Act to clarify Commission policy insofar as it relates to Commission participation in the economic stabilization program instituted at the direction of the President pursuant to the powers conferred upon the President by the Congress in the Economic Stabilization Act of 1970, as amended.

The Commission orders: (A) Section 2.90 in Part 2, General Policy and Interpretations, Subchapter A, Chapter I,

Title 18, Code of Federal Regulations is amended by inserting the words "Phase I (August 15, 1971–November 13, 1971)" immediately following the section title, by deleting paragraph (a) (2), and substituting therefor a new paragraph (a) (2). As so amended these portions of § 2.90 read:

§ 2.90 Implementation of Executive Order No. 11615.

PHASE I (AUGUST 15, 1971–NOVEMBER 13, 1971)

(a) * * *

(2) Unless otherwise provided, this Phase I Statement of Policy (18 CFR 2.90, 36 F.R. 16902, August 26, 1971, as amended) shall remain in full force and effect until modified by order, rule or regulation issued by the Commission.

(B) Part 2, General Policy and Interpretations, Subchapter A, Chapter I, Title 18, Code of Federal Regulations is amended by adding new § 2.90a which reads as follows:

§ 2.90a Implementation of Executive Order No. 11627 and 6 CFR 300.016.

(a) No public utility as defined in 6 CFR 300.016 subject to the jurisdiction of this Commission shall increase a rate or charge without having first received the approval of this Commission.

(b) For the purposes of the Economic Stabilization Act, as amended, and pursuant to 6 CFR 300.016(a), all increases in rates or charges appearing in Commission orders issued after November 13, 1971, shall be effective on the date and under the conditions specified in the Commission order, but in no event will such increases be retroactive prior to 12:01 a.m., November 14, 1971.

(c) For the purposes of the Economic Stabilization Act as amended and pursuant to 6 CFR 300.016(b), the Commission hereby announces that its actions with respect to increases in rates or charges in orders heretofore issued containing a provision that they are subject to the policy announced in Order No. 437 will be reviewed for consistency with the purposes of the Economic Stabilization Act of 1970, as amended. After such review, increases in rates or charges approved as being consistent with such purposes will be reported as supplements to this order and shall be effective as of 12:01 a.m., November 14, 1971.

(d) For the purposes of the Economic Stabilization Act, as amended, the Commission announces that its actions with respect to increases in rates or charges otherwise effective, but for the policy announced in Order No. 437, where the applicability of Order No. 437 is not reflected in any Commission order, such actions will be reviewed for consistency with the Economic Stabilization Act, as amended, and, after such review, increases in rates or charges approved as being consistent with such purposes will be reported as supplements to this order

and shall be effective as of 12:01 a.m., November 14, 1971.

(e) Orders heretofore issued containing a provision that they are subject to Order No. 437, but which do not authorize increases in rates or charges, will also be reviewed, and actions taken thereon will also be reported as supplements to this order, with appropriate indications as to relief from any requirement imposed by Order No. 437.

(C) This amended Statement of Policy and Order is effective as of 12:01 a.m., November 14, 1971.

(D) The Secretary shall cause prompt publication of this order to be made in the FEDERAL REGISTER.

By the Commission.

[SEAL]

KENNETH F. PLUMB,
Secretary.

[FR Doc.71-17227 Filed 11-24-71; 8:51 am]

Chapter V—Environmental Protection Agency

REDESIGNATION AND REPUBLICATION

CROSS REFERENCE: For a document affecting the changes described above, see Title 40, F.R. Doc. 71-17201, appearing in this issue.

Title 45—PUBLIC WELFARE

Subtitle A—Department of Health, Education, and Welfare, General Administration

PART 15—RELOCATION ASSISTANCE AND REAL PROPERTY ACQUISITION POLICIES

Statutory Authority; Correction

The document issuing Part 15, Subtitle A, of Title 45 of the Code of Federal Regulations, published in the FEDERAL REGISTER on September 22, 1971, at 36 F.R. 18838, is corrected by adding immediately following the Table of Contents the following:

AUTHORITY: The provisions of this Part 15 issued under sec. 213, 84 Stat. 1900, 42 U.S.C. 4633.

Approved: November 19, 1971.

STEVEN D. KOHLERT,
Acting Deputy Assistant
Secretary for Management.

[FR Doc.71-17266 Filed 11-24-71; 8:51 am]

Chapter XII—Environmental Protection Agency

REDESIGNATION AND REPUBLICATION

CROSS REFERENCE: For a document affecting the changes described above, see Title 40, F.R. Doc. 71-17201, appearing in this issue.

Title 40—PROTECTION OF ENVIRONMENT

Chapter I—Environmental Protection Agency

REORGANIZATION AND REPUBLICATION

Under the authority of Reorganization Plan No. 3 of 1970 (3 CFR 1970 Comp., p. 199), 35 F.R. 15623, a variety of activities related to pollution abatement control were transferred to the Environmental Protection Agency.

Regulations issued by the Environmental Protection Agency were published in various titles of the Code of Federal Regulations. Such regulations are being reorganized and transferred to Chapter I of Title 40—Protection of Environment. All amendments to these regulations are included in this republication through November 4, 1971. The following table shows the relationship of these regulations prior to this republication and the redesignations reflected in Title 40.

Old Title and Part No.	New Parts in Title 40
42 CFR Part 410	Part 50
42 CFR Part 420	Part 51
42 CFR Part 475	Revoked
42 CFR Part 476	Part 76
42 CFR Part 479	Part 79
42 CFR Part 481	Part 81
45 CFR Part 1201	Part 85
18 CFR Part 602	Part 20
18 CFR Part 604	Part 104
18 CFR Part 606	Part 106
18 CFR Part 607	Part 107
18 CFR Part 609	Part 109
18 CFR Part 610	Part 110
18 CFR Part 615	Part 115
18 CFR Part 620	Part 120
18 CFR Part 622	Part 122
7 CFR Part 2762	Part 162
7 CFR Part 2763	Part 163
7 CFR Part 2764	Part 164
21 CFR Part 420	Part 180

Subchapter B, Title 40 is hereby reserved for all regulations pertaining to "Grants" of the Environmental Protection Agency. Previously published grant regulations are hereby removed from the Code of Federal Regulations, but are retained in force as uncodified regulations. Grant regulations thus affected are as follows:

Title 18, Part 601—Grants for water pollution control.

Title 42, Part 456—Grants for air pollution control programs.

Title 42, Part 460—General Provisions Applicable to Grants Under Sections 204, 205, 207, 208, and 210 of the Solid Waste Disposal Act (36 F.R. 18622).

Title 42, Part 461—Grants for Studies, Investigations, Surveys, and Demonstrations Under Section 204 or 205 of the Solid Waste Disposal Act (36 F.R. 18625).

Title 42, Part 462—Grants for Research, Investigations, Experiments, Surveys, and Studies Under Section 204 or 205 of the Solid Waste Disposal Act (36 F.R. 18625).

Title 42, Part 463—Grants for Planning Under Section 207 of the Solid Waste Disposal Act (36 F.R. 18626).

Title 42, Part 464—Grants for Resource Recovery Systems and New or Improved Solid Waste Disposal Facilities under Section 208 of the Act (36 F.R. 18626).

Title 42, Part 465—Grants for Training under Section 204 or 210 of the Solid Waste Disposal Act (36 F.R. 18628).

Part 475 of Title 42 is hereby revoked. Parts 3 and 4 of Title 40 are included in this republication of Chapter I without substantive change. Chapter I is set forth below in its entirety.

WILLIAM D. RUCKELSHAUS,
Administrator,
Environmental Protection Agency.

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- Part 3 Employee responsibilities and conduct.
- 4 Interim regulations and procedures for implementing the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.
- 20 Certification of Facilities.

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- 104 Standards-setting conferences, hearings, and notifications of alleged violators of water quality standards.
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- 164 Rules governing the appointment, compensation, and proceedings of an advisory committee; and rules of practice governing hearings under the Federal Insecticide, Fungicide, and Rodenticide Act.
- 180 Tolerances and exemptions from tolerances for pesticide chemicals in or on raw agricultural commodities.

SUBCHAPTER F—RADIATION PROGRAMS (RESERVED)

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SUBCHAPTER A—GENERAL

PART 3—EMPLOYEE RESPONSIBILITIES AND CONDUCT

- Sec. 3.735-101 Adoption of regulations.
- 3.735-102 Counselor and deputy counselors.
- 3.735-103 Statements of employment and financial interests.
- 3.735-104 Disciplinary and other remedial action.
- 3.735-105 Gifts, entertainment, and favors.
- 3.735-106 Outside employment.
- 3.735-107 Specific provisions of agency regulations governing special Government employees.

AUTHORITY: The provisions of this Part 3 issued under E.O. 11222, 30 F.R. 6469, 3 CFR, 1964-1965 Comp., p. 306; 5 CFR § 735.101 et seq.

§ 3.735-101 Adoption of regulations.

Pursuant to 5 CFR § 735.104(f), the Environmental Protection Agency (referred to hereinafter as the Agency) hereby adopts the following sections of Part 735 of Title 5, Code of Federal Regulations: Sections 735.101-735.102, 735.201a, 735.202 (a), (d)-(f), 735.203-735.210, 735-302, 735.303(a), 735.304, 735.305(a), 75.403 (a)-(c), 735.403a, 735.404-735.411. These adopted sections are modified and supplemented as set forth in this part.

§ 3.735-102 Counselor and Deputy Counselors.

(a) The Deputy General Counsel shall serve as the Counselor required to be appointed pursuant to 5 CFR § 735.105. The Counselor shall perform the functions described in 5 CFR § 735.105 and those described in § 3.735-103, relating to statements of employment and financial interests.

(b) The Deputy Counselors required to be appointed pursuant to 5 CFR § 735.105 shall be the Assistant Administrators, Deputy Assistant Administrators, Regional Administrators, and other office heads reporting directly to the Administrator or the Deputy Administrator. The Deputy Counselors shall perform the functions described in 5 CFR § 735.105 and those set forth in § 3.735-103, relating to statements of employment and financial interests.

§ 3.735-103 Statements of employment and financial interests.

(a) Employees required to submit statements of employment and financial interests under 5 CFR § 735.403 (a)-(c) shall be advised in writing of that requirement.

(b) Any employee aggrieved by the requirement that he submit a statement of employment and financial interests pursuant to paragraph (a) of this section shall have the opportunity to demand review of such requirement, in accordance with such grievance procedures as may from time to time be established by the Administrator.

(c) Each statement of employment and financial interest required under this part shall be submitted for the review of the Deputy Counselor to whose office the reporting employee is permanently assigned, except that statements of employment and financial interest of employees in the immediate office of the Administrator and those of the Deputy Counselors shall be submitted for the review of the Counselor.

(d) When the review described in paragraph (c) of this section indicates a conflict between the interests of an employee or special Government employee of the Agency and the performance of his services for the Government, the reviewing official shall have the indicated conflict brought to the attention of the employee or special Government employee, grant the employee or special Government employee an opportunity to explain the indicated conflict, and attempt to resolve the indicated conflict. If the indicated conflict cannot be resolved, the reviewing official shall forward a written report on the indicated conflict to the Administrator through the Counselor.

§ 3.735-104 Disciplinary and other remedial action.

An employee or special Government employee of the Agency who violates any of the regulations in this part or adopted under § 3.735-101 may be disciplined. The disciplinary action may be in addition to any penalty prescribed by law for the violation. In addition to or in lieu of disciplinary action, remedial action to end conflicts or appearance of conflicts of interest may include but is not limited to:

- (1) Changes in assigned duties;
- (2) Divestment by the employee or special Government employee of his interest; or
- (3) Disqualification for a particular assignment.

§ 3.735-105 Gifts, entertainment, and favors.

The Agency authorizes the exceptions to 5 CFR § 735.202(a) set forth in 5 CFR § 735.202(b) (1)-(4).

§ 3.735-106 Outside employment.

An employee of the Agency may engage in outside employment or other outside activity not incompatible with the full and proper discharge of the duties and responsibilities of his Government employment. An employee who engages in

outside employment shall report that fact in writing through channels to the appropriate deputy counselor designated by § 3.735-102.

§ 3.735-107 Specific provisions of agency regulations governing special Government employees.

(a) Special Government employees, as defined in 5 CFR § 735.102(e), of the Agency shall adhere to the standards of conduct applicable to employees as set forth in this part and adopted under § 3.735-101, except for that set forth in 5 CFR § 735.203(b).

(b) Special Government employees of the Agency may teach, lecture, or write in a manner not inconsistent with 5 CFR § 735.203(c).

(c) Pursuant to 5 CFR § 735.305(b), the Agency authorizes the same exceptions concerning gifts, entertainment, and favors for special Government employees as are authorized for employees by § 3.735-105.

(d) Each special Government employee shall, not later than the time of his employment, submit a statement of employment and financial interests as provided in § 3.735-103, such statement to include:

- (1) All other employment; and
- (2) The financial interests of the special Government employee which the Counselor shall determine are relevant in the light of the duties to be performed by such special Government employee.

(e) The reporting requirement for special Government employees established by this section may be waived by the Administrator subject to 5 CFR § 735.412(c).

PART 4—INTERIM REGULATIONS AND PROCEDURES FOR IMPLEMENTING THE UNIFORM RELOCATION ASSISTANCE AND REAL PROPERTY ACQUISITION POLICIES ACT OF 1970

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Appendix A—Records.

AUTHORITY: The provisions of this Part 4 issued under sec. 213, 84 Stat. 1900.

Subpart A—General

§ 4.1 Purpose and policy.

(a) This part implements the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 which provides for the uniform and equitable treatment of persons displaced from their homes, businesses, or farms by Federal and federally assisted projects and establishes uniform and equitable land acquisition policies for Federal and federally-assisted programs.

(b) In implementing the act, it is the policy of the Environmental Protection Agency to deal consistently and fairly with all persons whose property is taken for public projects and all persons who are displaced from their homes, businesses or farms.

§ 4.3 Definitions.

As used in this part—

(a) "Administrator" means the Administrator of the Environmental Protection Agency or his designee.

(b) "Business" means a lawful activity, other than a farm operation, conducted primarily—

(1) For the purchase, sale, lease, or rental of personal and real property, or the manufacture, processing, or market-

ing of products, commodities, or other personal property;

(2) For the sale of services to the public; or

(3) By a nonprofit organization.

(c) "Displacing Agency" means EPA or the Federal or State agency responsible for carrying out the project for which real property is to be acquired.

(d) "Dwelling" includes a single-family house, a single-family unit in a multifamily building, a unit of a condominium or cooperative housing project, a mobile home, or any other residential unit.

(e) "Economic rent" means the amount of rent a tenant or homeowner would have to pay for a dwelling similar to the acquired dwelling in a comparable area on the private market.

(f) "Farm operation" means a lawful activity conducted solely or primarily for the production of one or more agricultural products or commodities, including timber, for sale or home use and customarily producing those products or commodities in sufficient quantity to be capable of providing at least one-third of the operator's income, however, in instances where such operation is obviously a farm operation it need not contribute one-third to the operation's income for him to be eligible for relocation payments.

(g) "Federal agency" means a department, agency, or instrumentality in the Executive Branch of Government (except the National Capital Housing Authority), any wholly-owned Government corporation (except the District of Columbia Redevelopment Land Agency), and the Architect of the Capitol, the Federal Reserve Banks and branches thereof.

(h) "Federal financial assistance" means a contract, grant, loan, or contribution by the United States to a State or State agency, other than a Federal guarantee or insurance or an annual payment or capital loan to the District of Columbia.

(i) "Federally assisted" means, with respect to States or State agencies, assisted by a contract, grant, loan, or contribution by the United States, other than a Federal guarantee or insurance or an annual payment or capital loan to the District of Columbia.

(j) "Homeowner" means an individual or family who owns a dwelling.

(k) "Initiation of negotiations" means the date the displacing agency makes its first personal contact with the owner of real property, or his representative, to discuss price of the property to be acquired.

(l) "Mortgage" means a lien commonly given to secure an advance on, or the unpaid purchase price of, real property under the laws of the State in which real property is located, together with any credit instruments secured thereby.

(m) "Own" means holding any of the following interests in a dwelling or a contract to purchase one of those interests:

(1) A fee title.

(2) A life estate.

(3) A 99-year lease.

(4) A lease with at least 50 years to run from the date of acquisition of the property.

(5) An interest in a cooperative housing project which includes the right to occupy a dwelling.

(n) "Person" includes a partnership, company, corporation, or association as well as individual.

(o) "State" means any of the several States of the United States, the District of Columbia, the Commonwealth of Puerto Rico, a territory or possession of the United States, the trust territories of the Pacific Islands, or a political subdivision of any of those jurisdictions.

(p) "State agency" means a department, public body, agency or instrumentality of a State or of a political subdivision of a State, or any department, agency or instrumentality of two or more States or of two or more political subdivisions of a State or States, the National Capital Housing Authority and the District of Columbia Redevelopment Land Agency.

(q) "Tenant" means an individual or family who rents, or is temporarily in lawful possession of a dwelling, including a sleeping room.

§ 4.5 Applicability.

This part applies to projects which are part of a Federal or federally-assisted program administered by the Environmental Protection Agency and which, after January 1, 1971, cause the displacement of persons or the acquisition of real property.

§ 4.7 Displaced person; qualifications.

(a) Subject to the requirements of paragraphs (c), (d), and (e) of this section, a person qualifies as a displaced person for the purposes of this part if after January 1, 1971, he moves from real property, or moves his personal property from real property, on which he resides or conducts a business or farm operation, and the move is a direct result of—

(1) The initiation of negotiations for the real property;

(2) A written notice from the displacing agency of its intent to acquire the real property by a definite date; or

(3) A written order from the displacing agency to vacate the real property; for a project undertaken by the Environmental Protection Agency or a State agency receiving Federal financial assistance from EPA.

(b) A person may qualify as a displaced person, regardless of—

(1) Whether the property is acquired by a Federal or State agency;

(2) The method of acquisition;

(3) The name or status of the person who acquires or holds fee title to the property; or

(4) Whether Federal funds contribute directly to the payment for the property, if the property must be acquired for a Federal or federally-assisted program or

project, and the end result is to serve or be considered to serve in the public interest.

(c) A person does not qualify as a displaced person under paragraph (a) (1) or (2) of this section until—

(1) The displacing agency becomes entitled to possession of the real property under an agreement or a court order in a condemnation proceeding for acquiring the property;

(2) The owner conveys title to the real property to the displacing agency; or

(3) The owner and the displacing agency enter into a contract for the purchase of the real property, but only if the real property is not to be reoccupied before the agency is to acquire title or the right to possession.

(d) A person, other than the former owner or tenant, who enters into rental occupancy of real property after its ownership passes to the displacing agency, does not qualify as a displaced person for the purposes of this part.

(e) A person who enters into occupancy of real property after the initiation of negotiations for that property or the issuance of a notice of intent to acquire that property by a given date, as the case may be, does not qualify as a displaced person for the purposes of this part.

§ 4.11 Comparable replacement dwelling; requirements.

A dwelling is a comparable replacement dwelling for the purposes of this part if it is—

(a) Decent, safe, and sanitary;

(b) Functionally equivalent and substantially the same as the dwelling being acquired with respect to—

- (1) Number of rooms;
- (2) Area of living space;
- (3) Age; and
- (4) State of repair.

(c) In an area not generally less desirable than the dwelling being acquired with respect to—

- (1) Public utilities; and
 - (2) Public and commercial facilities.
- (d) Reasonably accessible to the place of employment of the head of the displaced family or the displaced individual, as the case may be;

(e) Adequate to accommodate the displaced family or individual;

(f) In an equal or better neighborhood;

- (g) Available on the market; and
- (h) Within the financial means of the displaced family or individual.

§ 4.13 Decent, safe, and sanitary dwelling; requirements.

(a) A dwelling is decent, safe, and sanitary for the purposes of this part if it—

(1) Meets the applicable State or local building, plumbing, electrical, housing, and occupancy codes or similar ordinances or regulations for existing structures;

(2) Has a continuing and adequate supply of potable safe water;

(3) Has a kitchen or an area set aside for kitchen use which contains a sink in

good working condition and connected to hot and cold water, and properly connected to a sewage disposal system;

(4) Has a stove and refrigerator in good operating condition, if required by local code, ordinance, or custom, or, if not so required, utility service connections and adequate space for these installations in the kitchen or area set aside for kitchen use;

(5) Except in a geographical area where it is not normally included in new housing, has an adequate heating system in good working order capable of maintaining a minimum temperature of 70° F. in the living area (not including the bedrooms) under local outdoor design temperature conditions;

(6) Has a bathroom, well lighted and ventilated and affording privacy to a person within it, containing a lavatory and a bathtub or shower stall, properly connected to an adequate supply of hot and cold running water, and a flush toilet, all in good working order and properly connected to a sewage disposal system;

(7) Has an electrical wiring system in each room;

(8) Is structurally sound, clean, weathertight, and in good repair and adequately maintained;

(9) Has a safe, unobstructed means of egress leading to a safe open space at ground level and, in the case of a multi-dwelling building, access from each dwelling unit directly or through a common corridor to a means of egress to a safe open space at ground level and, in the case of a multidwelling building of more than two stories, at least two means of egress from the common corridor on each story;

(10) Has sleeping, living, cooking, and dining floor space (exclusive of such enclosed spaces as closets, pantries, bath or toilet rooms, service rooms, connecting corridors, laundries, unfurnished attics, foyers, storage spaces, cellars, utility rooms (or similar spaces) which—

(i) Measures at least 150 square feet for the first occupant and 100 square feet (70 square feet in the case of a mobile home) for each additional occupant;

(ii) Is subdivided into adequately ventilated rooms sufficient to accommodate the occupants;

(11) Is reasonably convenient to community services including schools, stores, and public transportation; and

(12) Open to all persons regardless of race, color, religion, sex, or national origin and consistent with the requirements of title VIII of the Civil Rights Act of 1968.

(b) If the applicable local housing code does not conform to all the requirements of paragraph (a) of this section but is reasonably comparable, the agency providing relocation assistance may submit a copy of the local code to the Administrator for approval as acceptable standards for decent, safe, and sanitary housing.

(c) In case of extreme hardship or other similar extenuating circumstances involving a displaced individual or fam-

ily, the displacing agency may, with the concurrence of the Administrator, waive any requirement of paragraph (a) (1) through (11) of this section.

§ 4.17 Decent, safe, and sanitary rental sleeping rooms; requirements.

(a) A rental sleeping room is decent, safe, and sanitary for the purposes of this part if it—

(1) Meets the applicable State or local building, plumbing, electrical, housing, and occupancy codes or similar ordinances or regulations for existing structures;

(2) Except in a geographical area where it is not normally included in new housing, has an adequate heating system in good working order which will maintain a minimum temperature of 70° F. under local outdoor design temperature conditions;

(3) Has an electrical wiring system;

(4) Is structurally sound, clean, weathertight, and in good repair and adequately maintained;

(5) Has a safe, unobstructed means of egress leading to a safe open space at ground level and, in the case of a rooming house, access from each sleeping room directly or through a common corridor to a means of egress to a safe open space at ground level and, in the case of a rooming house of more than two stories, at least two means of egress from the common corridor on each story;

(6) Is reasonably convenient to community services such as schools, stores and public transportation;

(7) Has at least 100 square feet of habitable floor space for the first occupant and 50 square feet of habitable floor space for each additional occupant; and

(8) Has use of a bathroom, well lighted and ventilated and afforded privacy to a person within it, including a door that can be locked if the facilities are separate from the sleeping room, containing a lavatory and a bathtub or shower stall, properly connected to an adequate supply of hot and cold running water, and a flush toilet, all in good working order and properly connected to a sewage disposal system.

(9) Open to all persons regardless of race, color, religion, sex, or national origin and consistent with the requirements of title VIII of the Civil Rights Act of 1968.

(b) If the applicable local housing code does not meet all the requirements of paragraph (a) of this section but is reasonably comparable, the agency providing relocation assistance may submit a copy of the local code to the Administrator for approval as acceptable standards for decent, safe, and sanitary housing.

(c) In case of extreme hardship or other similar extenuating circumstances involving a displaced individual or family, the displacing agency may, with the concurrence of the Administrator, waive any requirement of paragraph (a) (1) through (8) of this section.

§ 4.19 Records.

Each displacing agency shall maintain relocation records in accordance with the requirements of appendix A to this part and make them available during regular business hours for inspection by the Administrator. The records shall be retained by the agency for at least 3 years after completion of a project.

Subpart B—Requirements for Federal Projects**§ 4.31 Scope.**

This subpart prescribes requirements governing the administration of real property acquisition and relocation assistance for displaced persons for projects which are part of a Federal program administered by the Environmental Protection Agency.

§ 4.33 Determinations; displacement of persons.

(a) No Federal project to which this part applies which will result in the displacement of any person shall be approved by EPA until the Administrator determines that—

(1) Fair and reasonable relocation payments will be provided to displaced persons as required by Subparts E, F, and G of this part;

(2) Relocation assistance programs offering the services described in Subpart D of this part will be provided for displaced persons;

(3) The public was or will be adequately informed of the relocation payments and services which will be available under Subparts D, E, F, and G of this part; and

(4) Comparable replacement dwellings will be available, or provided if necessary, a reasonable period in advance of the time any person is to be displaced.

(b) EPA may not proceed with any phase of a Federal project if that phase will cause the displacement of any person until it is determined that—

(1) Based on a current survey and analysis of available replacement housing and in consideration of competing demands for that housing, comparable replacement dwellings will be available within a reasonable period of time prior to displacement; and

(2) Adequate provisions have been made to provide orderly, timely, and efficient relocation of displaced individuals and families to comparable replacement dwellings with minimum hardship to those affected.

§ 4.35 Determinations; acquisition of real property.

No Federal project to which this part applies and which will result in the acquisition of real property shall be approved until the Administrator determines that adequate provisions have been made to—

(a) Fully comply with the requirements of Subpart I, of this part; and

(b) Inform the public of the acquisition policies, requirements, and payments which will apply to the project.

§ 4.37 Appeals.

Any person aggrieved by a determination made by EPA, in connection with a Federal project or program, concerning the eligibility for, or amount of, any payment to such person under the regulations in this part, may appeal from such determination to the Administrator. Appeals shall be submitted in writing and addressed to the Administrator, Environmental Protection Agency, Washington, D.C. 20460. No appeal will be considered unless it is received by the Administrator within 90 days of the date of receipt by the person aggrieved of written denial, in whole or in part, of his application for payment. The appeal should include written substantiation of the appeal. An appeal may be presented by the attorney of the person aggrieved or by the person himself. The Administrator or his designated representative shall promptly issue a decision on the appeal, which decision may either uphold the original determination or allow the claimed relief in whole or in part. The decision shall be reduced to writing, and shall state the facts and law upon which it is based. A copy of the decision shall be furnished to the person aggrieved. The decision shall constitute the final EPA decision on the application for payment.

§ 4.39 State agency providing real property for a Federal project.

(a) Whenever a State agency is obligated to provide the necessary real property incident to a Federal project, the Environmental Protection Agency may not accept that real property until it is determined that the State agency has carried out all the requirements of this subpart. However, until July 1, 1972, this section is applicable to a State agency only to the extent that agency is able to meet the requirements of this subpart under State law.

(b) The cost to a State agency of providing the payments and services required by this subpart shall be paid in the same manner and to the same extent as the cost of the real property acquired for the project. However, until July 1, 1972, the Environmental Protection Agency will pay a State agency the full amount of the first \$25,000 of the cost of providing payments and services for any displaced person.

Subpart C—Requirements for Federally Assisted Projects**§ 4.51 Scope.**

This subpart prescribes requirements governing the administration of real property acquisition and relocation assistance for displaced persons for projects which are part of a federally assisted program administered by the Environmental Protection Agency.

§ 4.53 State agency required to submit relocation plan and statement of relocation procedure.

(a) As part of its application for Federal financial assistance for any project

which will entail the displacement of any person, a State agency shall submit a relocation plan to EPA. The relocation plan shall include:

(1) An inventory of the characteristics and needs of persons to be displaced. This inventory may be based upon a representative sampling process rather than a complete occupancy survey.

(2) An estimated inventory of currently available comparable replacement dwellings.

(3) Identification of any phase of the project which will require the displacement of any person.

(4) An analysis of the information required by subparagraphs (1), (2), and (3) of this paragraph which—

(i) Discusses relocation problems and possible solutions;

(ii) Provides an analysis of Federal, State, and community programs currently in operation in the project area which will affect the availability of housing;

(iii) Provides information on concurrent displacement and relocation by other governmental agencies or private concerns;

(iv) Describes the methods to be used to relocate displaced persons; and

(v) Explains the amount of lead time necessary to carry out a timely, orderly, and humane relocation program.

(b) Before beginning any phase of a project receiving Federal financial assistance, which phase will require the displacement of any person, a State agency shall submit to EPA a complete statement of the procedure it will follow in furnishing relocation services and making payments. The statement shall include:

(1) A declaration of understanding that the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, and this regulation, are applicable to federally assisted projects including those projects on which real property acquisition is financed by State money, but where Federal financial assistance will be used in construction.

(2) A description of procedures to be used to provide public information through brochures, public hearings, newspapers, radio, television, and other means of available assistance and payments to displaced persons. A copy of brochures shall be appended.

(3) A description of the moving expense payments to which displaced persons are entitled and the methods employed in determining the amount of entitlement. Schedules shall be appended where applicable.

(4) A description of the incidental transfer expenses that are payable. A copy of a typical closing statement indicating those payments shall be appended.

(5) A description of the appeal procedures that are available to displaced persons.

(6) A copy of all forms developed to carry out the relocation program.

(7) A current survey and analysis of available replacement housing and of competing demands for such housing.

§ 4.55 Prerequisites to EPA approval of Federal financial assistance to project or project phase; displacement.

(a) Except as provided in paragraph (c) of this section, EPA will not approve a grant, contract, or agreement for a Federally assisted project to which this part applies which will result in the displacement of any person until the State agency has complied with § 4.53(a) and until the head of the State agency provides the Administrator with satisfactory written assurances that:

(1) It will provide fair and reasonable relocation payments to displaced persons as required by Subparts E, F, and G of this part;

(2) It will provide relocation assistance programs for displaced persons offering the services described in Subpart D of this part;

(3) It will adequately inform the public of the relocation payments and services which will be available under Subparts D, E, F, and G of this part; and

(4) Comparable replacement dwellings will be available, or provided if necessary, a reasonable period in advance of the time any person is displaced.

(b) Except as provided in paragraph (c) of this section, EPA will not authorize a State agency to proceed with any phase of a Federally assisted project if that phase will cause the displacement of any person until the State agency has complied with § 4.53(b) and until the head of the State agency provides the Administrator with satisfactory written assurances that:

(1) Based on a current survey and analysis of available replacement housing and in consideration of competing demands for that housing, comparable replacement dwellings will be available a reasonable period of time prior to displacement, sufficient in number for the displaced persons who require them; and

(2) The State agency relocation procedures are realistic and are adequate to provide orderly, timely, and efficient relocation of displaced individuals and families to comparable replacement dwellings with minimum hardship to those affected.

(c) Until July 1, 1972, the requirements of paragraphs (a) and (b) of this section and the requirements of § 4.53 are applicable to a State agency only to the extent that agency is able under State law to comply with paragraphs (a) and (b) of this section.

(d) If a State agency maintains that it is legally unable to provide the assurances required by paragraphs (a) and (b) of this section, it shall furnish the Administrator a statement specifying any provisions of the relocation assistance assurances required by this section which it is unable to provide in whole or in part under the laws of that State, and an opinion of its chief legal official discussing the issues involved and citing legal authorities in support of the conclusions for each representation of legal inability to provide any part of the required assurances.

§ 4.57 Assurances required; acquisition of real property.

(a) EPA will not approve a grant, contract, or agreement for a federally assisted project to which this part applies and which will result in the acquisition of real property until the head of the State agency concerned provides the Administrator with satisfactory assurances that it will—

(1) Fully comply with the requirements of subpart I of this part; and

(2) Adequately inform the public of the acquisition policies, requirements, and payments which will apply to the project.

However, until July 1, 1972, the requirements of this paragraph are applicable to a State agency only to the extent that agency is able to comply with this paragraph under State law.

(b) If a State agency maintains that it is legally unable to provide the assurances required by paragraph (a) of this section, it shall furnish the Administrator a statement specifying any provisions of the relocation assistance assurances required by this section which it is unable to provide in whole or in part under the laws of that State, and an opinion of its chief legal official discussing the issues involved and citing legal authorities in support of the conclusions for each representation of legal inability to provide any part of the required assurances.

§ 4.59 Use of Federal financial assistance.

(a) The type of interest acquired in real property does not affect the eligibility of related relocation costs for Federal financial assistance provided the interest is sufficient to cause displacement.

(b) Federal financial assistance may not be used to pay a relocated person for any loss that is due to his negligence.

(c) Federal financial assistance may not be used for any payment under this part to a displaced person if that person receives a separate payment which is—

(1) Required by the State law of eminent domain;

(2) Determined by the Administrator to have substantially the same purpose and effect as a payment under this part; and

(3) Otherwise included as a project cost for which Federal financial assistance is available.

§ 4.61 Federal share of costs.

(a) The cost to a State agency of providing the payments and services required by Subparts A through H of this part, and the additional, identifiable cost to a State agency of providing the payments and services required by Subpart I of this part, shall be included as part of the cost of the federally-assisted project and, except as provided in paragraphs (b) and (c) of this section, the State agency is eligible for Federal financial assistance with respect to those costs in the same manner and to the same extent as other project costs.

(b) If Federal financial assistance is by grant or contribution, the Environmental Protection Agency will pay a State agency the full amount of the first \$25,000 of the cost of providing the payments and services described in this part for any displaced person because of any acquisition or displacement occurring before July 1, 1972.

(c) If Federal financial assistance is by loan, the Environmental Protection Agency will loan a State agency the full amount of the first \$25,000 of the cost of providing the payments and services described in this part for any displaced person because of any acquisition or displacement occurring before July 1, 1972.

§ 4.63 Appeals.

(a) An applicant for a payment under this subpart who is aggrieved by a displacing agency's determination as to the applicant's eligibility for payment or the amount of the payment may appeal that determination in accordance with the procedures established by the displacing agency under paragraph (b) of this section.

(b) Each displacing agency shall establish procedures for reviewing appeals by aggrieved applicants for payments under this subpart. The procedures shall insure that—

(1) Each appellant applicant has the opportunity for oral and written presentation and the right to have counsel participate in such presentation;

(2) Each appeal will be decided promptly;

(3) Each appeal decision will include a statement of the reasons upon which it is based and a copy of such decision will be furnished the appellant;

(4) The agency retains all documents associated with each appeal; and

(5) Each appellant applicant has a final appeal to the head of the displacing agency.

§ 4.65 Retroactive effect.

In the case of any project phase, grant, contract, or agreement approved by EPA prior to October 1, 1971, which will involve or has involved displacement of any person or acquisition of real property, after January 1, 1971, and prior to October 1, 1971, the State agency concerned shall:

(a) Comply with the provisions of this subpart providing payments or other benefits to persons as soon as possible; and

(b) Comply with the provisions of this subpart requiring submission of information or assurances to EPA, no later than November 1, 1971.

§ 4.67 Required amendment of existing grants, etc.

Any grant to, or contract or agreement with, a State agency executed before the date of publication of this part, under which Federal financial assistance is available to pay all or part of the cost of any program or project which will result in the displacement of any person on or after January 2, 1971, shall be amended to include the cost of providing payments and services under this subpart

and subpart I of this part. If the Administrator determines it is necessary for the expeditious completion of a program or project he may advance to the State agency the Federal share of the cost of any payment or assistance by such State agency pursuant to sections 206, 210, 215, and 305 of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.

Subpart D—Relocation Assistance Advisory Programs

§ 4.71 Scope.

This subpart prescribes requirements for relocation assistance advisory programs for persons displaced by projects which are part of a Federal or federally assisted program administered by the Environmental Protection Agency.

§ 4.73 Extension of services to adjacent occupants.

The displacing agency shall provide the relocation assistance advisory services described in this subpart to all displaced persons. The agency may also offer those services to any person occupying property immediately adjacent to the real property being acquired who, in the agency's opinion, will suffer substantial economic injury.

§ 4.75 Relocation programs; general requirements.

The displacing agency shall carry out a relocation assistance advisory program. The program shall provide for—

- (a) Explaining to displaced persons the relocation assistance and payments that are available;
- (b) Assisting displaced persons to complete applications required for payments;
- (c) Determining the needs of displaced persons for relocation assistance;
- (d) Informing displaced persons as to the availability and costs of comparable replacement dwellings and comparable locations for displaced business and farm operations;
- (e) Assisting each displaced person to obtain and move to a comparable replacement dwelling;
- (f) Informing displaced persons as to Federal and State housing programs; and
- (g) Providing counsel and advice to displaced persons that will minimize the hardships associated with adjusting to a new location.

§ 4.77 Organizational requirements.

The organization and procedures of the displacing agency for carrying out a relocation assistance advisory program shall include provisions for:

- (a) Assigning at least one person whose primary responsibility is to provide relocation assistance for one or more projects.
- (b) Establishing a local relocation office for each project where the agency determines that the volume of work or the needs of the displaced persons so require.
- (c) Maintaining and providing the following information for each project:

(1) Lists of replacement dwellings available to persons without regard to race, color, religion, or national origin drawn from various sources, suitable in price, size, and condition for displaced persons.

(2) Current information as to security deposits, closing costs, typical down payments, interest rates, and terms for residential real property in the area.

(3) Maps showing the location of schools, parks, playgrounds, shopping, and public transportation routes in the area.

(4) Schedules and costs of public transportation in the area.

(5) Copies of the agency's brochure explaining its relocation program, local ordinances pertaining to housing, building codes, open housing, consumer education literature on housing, shelter costs, and family budgeting.

(6) Subscriptions for apartment directory services, neighborhood and metropolitan newspapers, and where available, multiple listing services.

§ 4.79 Coordination with other agencies.

(a) The displacing agency shall coordinate its relocation assistance activities with the local officials of the Federal Housing Administration and Veterans Administration responsible for making properties acquired by those agencies available for direct sale to persons to be relocated as a result of governmental action.

(b) The person assigned by the agency to provide relocation assistance for a particular project shall maintain personal contact and exchange information with welfare agencies, urban renewal agencies, redevelopment authorities, public housing authorities, the Federal Housing Administration, the Veterans Administration, the Small Business Administration and other agencies providing services to displaced persons. He shall also collect and maintain information on private replacement properties in the area of the project through personal contact with real estate brokers, real estate boards, property managers, apartment owners and operators, and home building contractors.

§ 4.81 Public information; general.

(a) To insure public awareness of its relocation assistance advisory program, the displacing agency shall provide an opportunity for presentation of information and discussion of relocation services and payments at public hearings, prepare a relocation brochure, and give full and adequate public notice of the relocation program for each project to which this part applies.

(b) In areas where a language other than English is predominant, public information shall be published in the predominant language as well as in English.

§ 4.83 Public information; hearings.

(a) The information to be presented at a public hearing shall include—

- (1) Eligibility requirements, payment procedures, and limitations for moving expenses and replacement housing;

(2) A description of the expenses incidental to transfer of property that will be paid;

(3) Appeal procedures;

(4) A description of how relocation assistance and services will be provided;

(5) The address and telephone number of the local office of the State agency and the name of the relocation officer in charge;

(6) The identity, local address, and telephone number of any other cooperating agency;

(7) An estimate of the number of individuals or families, businesses, and farm operations to be relocated;

(8) The estimated number of dwelling units presently available to meet the replacement housing needs; and

(9) An estimate of the time necessary for relocation and the number of comparable replacement dwellings that will become available during that period.

(b) The extent of the presentation should depend on the comprehensiveness of the brochure. If the brochure covers a particular item in detail, it is sufficient to merely highlight what the brochure contains. If a particular item is not applicable to the project, it is not necessary to discuss the item in detail.

§ 4.85 Public information; brochure.

The displacing agency shall prepare a brochure which fully describes its relocation assistance advisory program, including information on payments for replacement housing and moving expenses. The brochure shall be distributed free of charge at all public hearings and given to any displaced person upon request. The brochure shall state where copies of any regulations implementing the relocation assistance program may be obtained.

§ 4.87 Public information; announcements.

The displacing agency shall provide brief public announcements of the relocation services, payments, and where the brochure describing the relocation program can be obtained. Public announcements shall be made through types of mass media that are familiar to persons who will be displaced by the project, such as local newspapers, radio, television, or posted advertisements.

§ 4.89 Public information; notices.

Within 15 days after approval to begin any phase of a project which will cause the displacement of any person, the displacing agency shall post notices of acquisition in adequate numbers and in places accessible to occupants of dwellings to be taken for the project. In addition, an adequate number of advertisements shall be run in newspapers normally read by occupants of dwellings to be taken. The posted notices and newspaper advertisements shall—

- (a) State the date approval was given for that phase of the project;
- (b) Define the area of the project;
- (c) Advise occupants of the area of the eligibility requirements for receiving

moving and replacement housing payments;

(d) Advise occupants to notify the agency before moving to insure eligibility for moving and replacement housing payments;

(e) Advise homeowners that to be eligible for relocation benefits they must sell to the agency; and

(f) State where the brochure describing the relocation program may be obtained.

§ 4.91 Waiver of public information requirements.

When persons are to be displaced from five or fewer dwellings, the displacing agency may, instead of complying with §§ 4.81, 4.83, 4.85, 4.87, 4.89, provide the information required to be provided by those sections to the displaced persons by personal delivery and detailed oral explanation of the information.

§ 4.93 Information for displaced persons.

(a) The displacing agency shall deliver to each displaced person either in person or by certified mail, return receipt requested—

(1) A brochure explaining the relocation assistance advisory program; and

(2) If it is not included in the brochure, a notice stating the eligibility requirements for payments for replacement housing and moving expenses.

(b) In addition to the information furnished under paragraph (a) of this section, the displacing agency shall deliver to each displaced homeowner or tenant, either in person or by certified mail, return receipt requested, a written statement setting forth the optional types and the actual amount of replacement housing payments to which they are entitled.

(c) The information required by paragraphs (a) and (b) of this section shall be furnished—

(1) To homeowners not later than the initiation of negotiations for the property or the issuance of a written notice of intent to acquire the property by a definite date, as the case may be; and

(2) To tenants within 7 days after the initiation of negotiations for the property or the issuance of a written notice of intent to acquire the property by a definite date; as the case may be.

(d) The displacing agency shall notify each displaced person of his right of appeal under § 4.37.

Subpart E—Moving and Related Expenses

§ 4.111 Scope.

This subpart prescribes the requirements governing the payment of moving and related expenses of persons displaced by projects which are part of a Federal or federally assisted program administered by the Environmental Protection Agency.

§ 4.113 Eligibility not dependent on length of occupancy.

A displaced person's eligibility for payment of moving and related expenses

is not affected by the length of time that he occupied the real property from which he is displaced.

§ 4.115 Payment limited to one move; exception.

(a) Except as provided by paragraph (b) of this section, payment of a displaced person's moving and related expenses may not be made for more than one move in connection with a particular project.

(b) If the Administrator considers it to be in the public interest he may authorize payment of a displaced person's moving and related expenses for additional moves.

§ 4.117 Family treated as person.

For the purpose of this subpart, the term "person" includes two or more individuals living together in the same dwelling as a single family unit and who are related to each other by blood, marriage, adoption, or legal guardianship.

§ 4.119 Noneligibility notice to rental occupants required.

If an agency rents out real property acquired in connection with a project to which this part applies, it shall notify the tenant and State in the rental agreement that the tenant will not be eligible for payment of displacement, moving, and related expenses under this subpart.

§ 4.121 Moving expenses; application and payment.

(a) Upon application by a displaced person for payment of moving and related expenses, the displacing agency shall—

(1) Pay those expenses in accordance with this subpart; or

(2) If the applicant elects to receive it, pay him a fixed allowance in accordance with Subpart F of this part.

(b) The application shall be in writing and filed with the displacing agency no later than 1 year after either the date of acquisition of the dwelling by the agency or the date the applicant vacated the dwelling, whichever is later. The application shall include an itemization of the expenses involved and, except as provided in paragraphs (d) and (e) of this section, shall be supported by receipts and such other evidence as the displacing agency may require.

(c) A displaced person may not be paid for his moving expenses in advance of the actual move unless the displacing agency finds that a hardship would otherwise result.

(d) If a displaced person, his mover, and the displacing agency agree by prearrangement in writing, the displaced person may submit an unpaid bill for moving expenses for direct payment.

(e) If the displacing agency contracts with independent movers on a schedule basis and provides a displaced person with a list of movers he may choose from to move his personal property, payment shall be made directly to the mover.

(f) In the case of a self-move by a displaced person, the amount of payment for actual reasonable moving expenses

may not exceed the cost of having the move accomplished by a commercial mover.

§ 4.123 Exclusions.

A displaced person is not entitled to be paid for—

(a) Additional expenses incurred because of living in a new location;

(b) Cost of moving structures or other improvements to real property which are reserved by the displaced person;

(c) Improvements to the replacement site, except when required by law;

(d) Interest on loans to cover moving expenses;

(e) Loss of good will;

(f) Loss of profits;

(g) Loss of trained employees;

(h) Personal injury;

(i) Cost of preparing the application for moving and related expenses; or

(j) Modification of personal property to adapt it to replacement site, except when required by law.

§ 4.125 Moving expenses; occupants of dwellings.

(a) Except as provided in § 4.123, persons displaced from dwellings are entitled to be paid actual reasonable expenses for—

(1) Transporting themselves and their personal property from the displacement site to a replacement site, but not more than 50 miles unless the displacing agency finds that the displaced person cannot relocate within that distance;

(2) Packing, crating, and, if the displacing agency finds it necessary, storing their personal property for not more than 6 months;

(3) If the displacing agency finds it necessary, advertising for packing, crating, storing, or transporting their personal property;

(4) Insuring against loss or damage of their personal property while in storage or transit; and

(5) Removing and reinstalling a household appliance, including reconnecting utilities, if—

(i) It is not acquired by the displacing agency as real property;

(ii) The displaced person agrees in writing that the appliance is personal property and releases the displacing agency from paying for it; and

(iii) It is not a real property improvement to the location site, unless reinstallation is otherwise required by law.

(b) A displaced person is entitled to be reimbursed for uninsurable loss or damage of his personal property while in the process of moving, if the loss or damage was not a result of his fault or negligence.

§ 4.127 Moving expenses; businesses and farm operations.

(a) Except as provided in § 4.123, a displaced person who conducts a business or farm operation which is discontinued or relocated is entitled to actual reasonable expenses for—

(1) Transporting his personal property from the displacement site to a

replacement site, but not more than 50 miles, unless, in the case of relocation, the displacing agency finds that the business or farm operation cannot be relocated within that distance;

(2) Packing, crating, and, if the displacing agency finds it necessary, storing his personal property for not more than 6 months;

(3) If the displacing agency finds it necessary, advertising for packing, crating, storing, or transporting his personal property;

(4) Insuring against loss or damage of his personal property while in storage or transit;

(5) Removing and reinstalling machinery and equipment including reconnecting utilities, if—

(i) It is not acquired by the displacing agency as real property;

(ii) The displaced person agrees in writing that the machinery or equipment is personal property and releases the displacing agency from paying it; and

(iii) It is not a real property improvement to the location site, unless the reinstallation is otherwise required by law; and

(6) Searching for a replacement business or farm operation, to the extent those expenses meet the requirements of § 4.135.

(b) A displaced person who conducts a business or farm operation which is discontinued or relocated is entitled to the actual direct losses of personal property resulting from the discontinuation or move, to the extent those losses meet the requirements of § 4.133.

(c) A displaced person who conducts a business or farm operation which is relocated is entitled to be reimbursed for uninsurable loss or damage of his personal property while in the process of moving, if the loss or damage is not the result of his fault or negligence.

§ 4.129 Moving expenses; advertising businesses.

A displaced person who conducts a lawful activity primarily for assisting in the purchase, sale, resale, manufacture, processing, or marketing of products, commodities, personal property, or services by the erection and maintenance of outdoor advertising displays, whether or not the displays are located on the premises on which any of those activities are conducted, is entitled to the moving expenses described in § 4.127.

§ 4.131 Low value, high bulk property; businesses and farm operations.

In the case of low value, high bulk personal property, such as junk, stockpiled sand, gravel, minerals, metals, or similar items, used in connection with a relocated business or farm operation, payment for actual reasonable moving expenses may not be more than the cost of replacing that property at the relocation site less the amount for which it could be sold at the displacement site.

§ 4.133 Actual direct losses; businesses and farm operations.

(a) Subject to the requirements and limitations in paragraphs (b) through

(f) of this section, a displaced person who conducts a business or farm operation is entitled to payment for actual direct losses of personal property that is used in connection with the business or farm operation but is—

(1) No longer needed because the business or farm operation is being discontinued; or

(2) Not being moved to a relocation site because it is not suitable for use there.

(b) If a business or farm operation is relocated, payment for actual direct losses of personal property may not be more than the amount the displacing agency determines the reasonable moving expenses would be for moving that property to the relocation site.

(c) A displaced person who conducts a business or farm operation shall make a bona fide effort to sell personal property he does not move.

(d) If a displaced person relocates a business or farm operation and sells an item of personal property that he does not move and promptly replaces it with a comparable item, payment for actual direct loss of the original item may not be more than the replacement cost less its sale price, or the cost of moving the original item, whichever is less.

(e) If a displaced person discontinues business or farm operation and sells an item of personal property, payment for actual direct loss of that item may not be more than the in-place value of the item less its sale price, or the cost of moving it, whichever is less.

(f) If a displaced person who conducts a business or farm operation abandons an item of personal property after making a bona fide effort to sell that property, payment for the actual direct loss of that item may not be more than the in-place value of the item less what its sale price would have been, or the cost of moving it, whichever is less.

§ 4.135 Expenses in searching for replacement business or farm operation.

(a) Except as provided in paragraph (b) of this section, a displaced person who conducts a business or farm operation is entitled to not more than \$500, or such higher amount as the displacing agency considers justified under the circumstances, for actual reasonable expenses in searching for a replacement business or farm operation including—

(1) Cost of travel;

(2) Cost for meals and lodging;

(3) An amount for time spent searching, based on the salary or earnings of the displaced person from the business or farm operation, but not more than \$10 per hour; and

(4) If the displacing agency considers it desirable, the cost of a broker or realtor to locate a replacement site.

(b) A displaced person who conducts an advertising business described in § 4.129, is entitled to not more than \$100, or if the displacing agency considers it justified under the circumstances not more than \$500, for actual reasonable expenses in searching for a replacement outdoor advertising display site.

Subpart F—Fixed Allowance in Lieu of Moving and Related Expenses

§ 4.151 Scope.

This subpart prescribes the requirements governing payment of dislocation and moving expense allowances to displaced persons who are eligible for payment of their actual moving and related expenses under Subpart E of this part, but elect to receive a fixed allowance in lieu thereof.

§ 4.153 Schedule of moving expense allowances; occupants of dwellings.

The displacing agency shall establish (or obtain) and maintain a schedule of moving expense allowances applicable to persons displaced from dwellings by projects to which this part applies, based on current moving costs in the project's locality. The allowance for any individual or displaced person may not exceed \$300.

§ 4.155 Dislocation and moving expense allowances; occupants of dwellings.

A person displaced from a dwelling who elects to receive fixed dislocation and moving expense allowances in lieu of payment of actual moving and related expenses is entitled to—

(a) A dislocation allowance of \$200; and

(b) The applicable moving expense allowance specified in the schedule of moving expense allowances maintained under § 4.153 for the locality concerned.

§ 4.156 Family treated as person.

For the purpose of this subpart, the term "person" includes two or more individuals who are living together in the same dwelling, as a single family unit and who are related to each other by blood, marriage, adoption, or legal guardianship.

§ 4.157 Application and payment.

Application and payment procedures under this subpart shall be as stated in § 4.121, except that a person electing to be paid under this subpart need not file an itemization of expenses of moving.

§ 4.159 Fixed allowance; businesses.

A displaced person who conducts a business and elects to receive a fixed allowance in lieu of actual moving and related expenses is entitled to a fixed amount equal to the average annual net income of the business, computed in accordance with § 4.163, but not less than \$2,500 or more than \$10,000, if that business—

(a) Substantially contributes to the income of the displaced person;

(b) Cannot, in the opinion of the displacing agency, be relocated without substantial loss of existing patronage taking into consideration—

(1) The type of the business;

(2) The nature of its clientele; and

(3) The relative importance of the displacement and proposed relocation sites to the business; and

(c) Is not part of a commercial enterprise having at least one other establishment engaged in the same or similar

business which is not being acquired by a State agency or the United States.

§ 4.161 Fixed allowance; farm operation.

(a) A displaced person who conducts a farm operation and elects to receive a fixed allowance in lieu of actual moving and related expenses is entitled to a fixed amount equal to the average annual net income of the farm operation, computed in accordance with § 4.163, but not less than \$2,500 or more than \$10,000.

(b) In the case of a partial acquisition and displacement of a farm operation, the fixed allowance described in paragraph (a) of this section may be paid only if the displacing agency finds that—

(1) The displaced activity was a farm operation before the acquisition of the displacement site; and

(2) The property remaining after acquisition is not an economic unit.

§ 4.163 Computing average annual net income; businesses and farm operations.

(a) For the purposes of this subpart, the average annual net income of a business or farm operation is its average annual net earnings before Federal, State, and local income taxes during the 2 tax years immediately preceding the tax year in which it is displaced. Net earnings include compensation obtained from the business or farm operation by its owner, his spouse, or dependents, or in the case of a corporate owner, by the holder of a majority of the common stock, his spouse, or dependents.

(b) For the purpose of determining majority ownership, stock held by an individual, his spouse, and his dependents shall be treated as a unit.

(c) If the displacing agency finds that the 2 tax years immediately preceding displacement are not representative, or if the business or farm operation has not been in operation that long, it may, with the concurrence of the Administrator, prescribe some other time period for computing average annual net income.

(d) If a displaced person who conducts a business or farm operation elects to receive a fixed payment under this subpart, he shall provide proof of his earnings from the business or farm operation to the displacing agency. Proof of earnings may be established by income tax returns, certified financial statements, or other similar evidence.

Subpart G—Replacement Housing Payments

§ 4.171 Scope.

This subpart prescribes the requirements governing payment for replacement housing for individuals and families displaced by projects which are part of a Federal or federally assisted program administered by the Environmental Protection Agency.

§ 4.173 Purchase of a decent, safe, and sanitary dwelling.

A displaced tenant or homeowner "purchases" a dwelling within the meaning of this subpart when he—

(a) Acquires an existing dwelling;

(b) Rehabilitates a substandard dwelling which he owns or acquires;

(c) Relocates a dwelling which he owns or acquires;

(d) Relocates and rehabilitates a substandard dwelling which he owns or acquires;

(e) Constructs a new dwelling on a site which he owns or acquires;

(f) Contracts to purchase a dwelling on a site provided by a builder; or

(g) Contracts for the construction of a dwelling on a site provided by a builder or on a site which he owns or acquires.

§ 4.175 Occupancy.

(a) A displaced tenant or homeowner "occupies" a dwelling within the meaning of this subpart only if the dwelling is his permanent place of residence.

(b) If a tenant or homeowner contracts for the construction or rehabilitation of a replacement dwelling, and for reasons not within his control the construction or rehabilitation is delayed beyond the date occupancy is required, the displacing agency may extend the period of eligibility for a replacement housing payment until the tenant or homeowner occupies the replacement dwelling.

§ 4.177 Inspection of replacement dwelling required.

(a) Before making a replacement housing payment to a displaced homeowner or tenant, or releasing a payment from escrow, as the case may be, the displacing agency shall inspect the replacement dwelling to determine whether or not it meets the criteria for decent, safe, and sanitary dwellings. The displacing agency may use the services of any public agency ordinarily engaged in housing inspection to conduct the inspection required by this section.

(b) A determination by the displacing agency that a dwelling meets the criteria for decent, safe, and sanitary housing is solely for the purpose of this subpart and is not a representation for any other purpose.

§ 4.179 Application and payment.

(a) Upon application by a displaced homeowner or tenant who meets the requirements of this subpart for a replacement housing payment, the displacing agency shall—

(1) If he has purchased or rented, and occupied a decent, safe, and sanitary dwelling, make the payment directly to him, or, at his option, to the seller or lessor of the decent, safe, and sanitary dwelling; or

(2) If he has purchased or rented, but not yet occupied a decent, safe, and sanitary dwelling, upon his request make the payment into an escrow account.

(b) The application shall be in writing and filed with the displacing agency within 18 months after the date the applicant was required to vacate an acquired dwelling or 6 months after final adjudication of a condemnation proceeding, whichever is later.

§ 4.181 Eligibility.

(a) A displaced homeowner is eligible for a replacement housing payment under § 4.183 if he—

(1) Qualifies a displaced person under § 4.7;

(2) Actually owned and occupied the acquired dwelling for at least 180 consecutive days immediately before the initiation of negotiations for the property or the issuance of a written notice of intent to acquire the property by a definite date, as the case may be; and

(3) Purchases and occupies a decent, safe, and sanitary dwelling within 1 year after the date he receives final payment for the acquired dwelling, or 1 year after the date he is required to move from the acquired dwelling, whichever is later.

(b) A displaced homeowner is eligible for a replacement housing payment under § 4.185 if he—

(1) Qualifies as a displaced person under § 4.7;

(2) Actually owned and occupied the acquired dwelling for at least 90 consecutive days immediately before the initiation of negotiations for the property or the issuance of a written notice of intent to acquire the property by a definite date, as the case may be; and

(3) Rents or purchases, and occupies a decent, safe, and sanitary dwelling within 1 year after the date he receives final payment for the acquired dwelling, or 1 year after date he is required to move from the acquired dwelling, whichever is later.

(c) A displaced tenant is eligible for a replacement housing payment under § 4.185 if he—

(1) Qualifies as a displaced person under § 4.7;

(2) Actually occupied the acquired dwelling for at least 90 consecutive days immediately before the initiation of negotiations for the property or the issuance of a written notice of intent to acquire the property by a definite date, as the case may be; and

(3) Rents or purchases, and occupies a decent, safe, and sanitary dwelling within 1 year after the date he is required to move from the acquired dwelling.

(d) For the purpose of paragraphs (a) (2) and (b) (2) of this section, if a homeowner inherits an interest in a dwelling by devise or operation of law, his tenure of ownership includes the tenure of the preceding homeowner.

§ 4.183 Replacement housing payment; purchase price.

A displaced homeowner who qualifies under § 4.181(a) is entitled to a replacement housing payment of not more than \$15,000. Within that limitation the payment shall consist of the following amounts:

(a) If the reasonable cost of a comparable replacement dwelling is more than the acquisition price of the acquired dwelling, the difference between them.

(b) If there was a bona fide mortgage which constituted a valid lien on the

acquired dwelling for at least 180 days before the initiation of negotiations for the acquired dwelling and if the cost of financing the purchase of a replacement dwelling includes increased interest costs, an amount to compensate for that increase.

(c) An amount necessary to cover incidental expenses on the purchase of a replacement dwelling, but not including prepaid expenses.

§ 4.185 Replacement housing payments; rent and down payments.

A displaced homeowner who qualifies under § 4.181(b) or a displaced tenant who qualifies under § 4.181(c), is entitled to a replacement housing payment of not more than \$4,000. Within that limitation the payment shall be that amount necessary for the homeowner or tenant to—

(a) Rent a comparable replacement dwelling for a period of not more than 4 years; or

(b) Make the down payment required for a conventional loan and cover the incidental expenses on the purchase of a comparable replacement dwelling.

§ 4.187 Rules for considering land values.

In determining the amount of a replacement housing payment under § 4.183(a) the following rules apply:

(a) If the dwelling is located on a tract typical for residential use in the area, the amount payable is the probable selling price of a comparable replacement dwelling on a tract typical for the area less the value of the acquired property.

(b) If the dwelling is located on a tract larger than typical for residential use in the area, the amount payable is the probable selling price of a comparable replacement dwelling on a tract typical for the area less the estimated value of the dwelling assuming it was located on a tract typical for the area.

(c) If the dwelling is located on a tract that has a use higher and better than residential, the amount payable is the probable selling price of a comparable replacement dwelling on a tract typical for residential use in the area less the estimated value of the dwelling assuming it was located on a tract typical for residential use in the area.

§ 4.189 Limitations; payment for purchase price.

(a) The price established as the reasonable cost of a comparable replacement dwelling sets the upper limit of the differential amount payable under § 4.183(a). To qualify for the full amount, the homeowner must purchase and occupy a decent, safe, and sanitary dwelling higher in value than the acquired dwelling.

(b) If the homeowner voluntarily purchases and occupies a decent, safe, and sanitary dwelling at a price less than the reasonable cost established for a comparable replacement dwelling, the amount payable under § 4.183(a) is that amount required to pay the difference between the acquisition price of the acquired dwelling and the actual purchase

price of the decent, safe, and sanitary dwelling.

§ 4.191 Reasonable cost of comparable replacement dwelling.

In determining the reasonable cost of a comparable replacement dwelling available on the private market, the displacing agency shall use one of the following methods:

(a) It may establish a schedule of reasonable acquisition costs for the various types of comparable replacement dwellings which are available. If more than one agency is administering a project causing displacements in the area, it shall cooperate with those agencies in establishing a uniform schedule for the area. The schedule must be based on a current analysis of the market to determine a reasonable cost for each type of dwelling to be purchased. In large urban area this analysis may be confined to one area of the city, or may cover several different areas if they are comparable and equally accessible to public services and places of employment. To assure the greatest comparability of dwellings in any analysis, the analysis shall be divided into classifications of the type of construction, number of rooms, and price ranges.

(b) It may determine the reasonable cost of a comparable replacement dwelling by examining the probable selling prices of at least three comparable replacement dwellings which are available. Selection of the dwellings must be made by a qualified employee of the displacing agency who is familiar with real property values and current real estate transactions.

(c) If it finds that the methods described in paragraphs (a) and (b) of this section are not feasible for determining the reasonable cost of a comparable replacement dwelling, it may propose what it considers to be a feasible method to the Administrator for approval.

§ 4.193 Owner retention.

(a) If a displaced homeowner elects to retain and move his dwelling, the amount payable under § 4.183(a) is the difference between the acquisition price of the acquired dwelling and the sum of—

(1) The moving and restoration expenses;

(2) The cost of correcting decent, safe, and sanitary deficiencies, if any; and

(3) The estimated selling price of a comparable relocation site.

(b) The amount computed in accordance with paragraph (a) of this section is subject to the limitations prescribed in § 4.189.

§ 4.195 Increased interest costs.

(a) The amount payable for increased interest costs under § 4.183(b) is—

(1) The present value of the difference in interest costs and other debt service costs charged for refinancing an amount not more than the balance of the mortgage on the acquired dwelling

at the time of acquisition over a period not more than the remaining term of that mortgage; or

(2) An amount based on a schedule prescribed or approved by the Administrator and computed in accordance with this section.

(b) For purposes of computing increased interest costs, the following rules apply:

(1) The interest charge on the new mortgage may not exceed the prevailing interest rate currently charged by mortgage lending institutions in the area.

(2) The present value of the increased interest cost shall be computed at the prevailing interest rate paid on savings deposits by commercial banks in the area.

§ 4.197 Incidental expenses.

(a) The incidental expenses payable under § 4.183(c) or § 4.185(b) is the amount necessary to compensate the homeowner or tenant for actual costs incurred incident to the purchase of a decent, safe, and sanitary dwelling, including the following:

(1) Legal closing costs, including title search, preparing conveyance contracts, notary fees, surveys, preparing drawings of plots, and charges incident to recordation.

(2) Lender, FHA, or VA appraisal fees.

(3) FHA or VA application fee.

(4) Certification of structural soundness when required by the lender, FHA, or VA.

(5) Credit report.

(6) Title policies or abstract of title.

(7) Escrow agent's fee.

(8) State revenue stamps or sale or transfer taxes.

(b) An incidental expense which is part of a finance charge under the Truth in Lending Act, Title I, Public Law 90-321, and Regulation "Z" issued thereunder by the Board of Governors of the Federal Reserve System, may not be reimbursed.

§ 4.199 Computation of rental payments; tenants.

(a) The amount payable to a displaced tenant, other than a tenant of the displacing agency, for rent under § 4.185(a) is 48 times the reasonable monthly rent for a comparable replacement dwelling, less 48 times the average month's rent paid by the displaced tenant for the last 3 months before initiation of negotiations for the acquired dwelling if that rent was reasonable, and if not reasonable 48 times the monthly economic rent for the dwelling unit as established by the displacing agency.

(b) The amount payable to a displaced tenant of the displacing agency for rent under § 4.185(a) is 48 times the reasonable monthly rent for a comparable replacement dwelling less 48 times the monthly economic rent.

§ 4.201 Computation of rental payments; homeowners.

The amount payable to a displaced homeowner is 48 times the reasonable

monthly rent for a comparable replacement dwelling less 48 times the monthly economic rent, but not more than the homeowner would receive if he were eligible for a payment under § 4.183.

§ 4.203 Determining reasonable monthly rent.

In determining the reasonable monthly rent for a comparable replacement dwelling for the purposes of §§ 4.199 and 4.201, the displacing agency shall use one of the following methods:

(a) It may establish a schedule of monthly rents for each type of dwelling required. The schedule shall be based on an analysis of the available private market. If more than one agency is administering a project causing displacement in the area, it shall cooperate with those agencies in establishing a uniform schedule for the area.

(b) It may determine a reasonable rent by examining the rent of at least three comparable replacement dwellings available on the private market.

(c) If it finds that the methods described in paragraphs (a) and (b) of this section are not feasible, it may propose what it considers to be a feasible method to the Administrator for approval.

§ 4.205 Rental payments; method of payment.

If a rental payment under § 4.185(a) is more than \$500, it shall be made in four equal annual installments. Before making an annual payment, the displacing agency shall verify that the tenant still occupies a decent, safe, and sanitary dwelling.

§ 4.207 Computation of down payments.

The amount payable to a displaced homeowner or tenant for a down payment under § 4.185(b) is the full amount of the first \$2,000 of the required down payment plus one-half of any amount required over \$2,000. However, the homeowner or tenant must provide the other half of any amount required over \$2,000.

§ 4.209 Down payments.

A displaced homeowner or tenant shall apply the full amount of the payment to which he is entitled under § 4.185(b) to the down payment and the incidental expenses described in the closing statement.

§ 4.211 Provisional payment pending condemnation.

If the exact amount of a replacement housing payment cannot be determined because of a pending condemnation suit, the displacing agency may make a provisional replacement housing payment to the displaced homeowner based on the agency's maximum offer for the property, but only if the homeowner enters into an agreement with the agency that—

(a) Upon final adjudication of the condemnation suit the replacement housing payment will be recomputed on the basis of the acquisition price determined by the court;

(b) If the acquisition price as determined by the court is greater than the agency's maximum offer upon which the provisional replacement housing payment is based, the difference shall be refunded to the agency; and

(c) If the acquisition price as determined by the court is less than the agency's maximum offer upon which the provisional replacement housing payment is based, the difference shall be paid to the homeowner.

§ 4.213 Combined payments.

(a) If a homeowner is eligible for payment under § 4.183, but has previously received a rental payment under § 4.185(a), the amount of rental payment previously received shall be deducted from any amount that he receives under § 4.183.

(b) If a homeowner or tenant is eligible for a down payment under § 4.185(b), but has previously received a rental payment under § 4.185(a), the amount of rental payment previously received shall be deducted from the amount of any down payment that he receives under § 4.185(b).

§ 4.215 Partial use of home for business or farm operation.

(a) In the case of a displaced homeowner or tenant who has allocated part of his dwelling for use in connection with a displaced business or farm operation, a replacement housing payment may not be paid for that part of the property which is allocated to the business or farm operation.

(b) The eligibility of a person to receive a payment under § 4.127 is not affected by this section.

§ 4.217 Multiple occupants of a single dwelling.

(a) If two or more families, or an individual and a family, occupy the same dwelling, each such individual or family that elects to relocate separately is entitled to a separately computed replacement housing payment.

(b) If two or more individuals, not a family, occupy the same dwelling, they shall be treated as a single family in computing a replacement housing payment.

§ 4.219 Multifamily dwelling.

In the case of a displaced homeowner who is required to move from a one-family unit of a multifamily building which he owns, the replacement housing payment shall be based on the cost of a comparable one-family unit in a multifamily building or a single family structure, without regard for the number of units in the building being acquired.

§ 4.221 Certificate of eligibility pending purchase of replacement dwelling.

Upon request by a displaced homeowner or tenant who has not yet purchased and occupied a comparable replacement dwelling, but who is otherwise eligible for a replacement housing payment under this subpart, the displacing agency shall certify to any interested party, financial institution, or lending

agency, that the displaced homeowner or tenant will be eligible for the payment of a specific sum if he purchases and occupies a decent, safe, and sanitary dwelling within the time limits prescribed by § 4.181(a)(3), (b)(3), or (c)(3), as the case may be.

Subpart H—Relocation Assistance Functions Carried Out Through Other Agencies

§ 4.231 Authority to carry out relocation assistance through other agencies.

To prevent unnecessary expenses and duplication of activities, an agency that is required to provide relocation services or make relocation payments under this part may carry out any of those functions through the facilities, personnel, and services, of any Federal, State, or local governmental or private agency having an established organization for conducting relocation assistance programs.

§ 4.233 Interagency agreement required.

If the displacing agency elects to provide relocation services or make relocation payments through another agency, it shall enter into a written agreement with that agency. The agreement must be approved by the Administrator and must contain the following:

(a) An obligation on the part of the other agency to perform the services and make the relocation payments in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, and this part.

(b) A requirement that the records required by § 4.19 be retained by the other agency or turned over to the displacing agency and that they be retained for a period of at least 3 years after payment of the final voucher on each project, regardless of which agency retains them.

(c) A requirement that the records required by § 4.19 be available for inspection by representatives of the Environmental Protection Agency at any reasonable business hour.

(d) If the contract is with a public agency administering another Federal or federally assisted program, a description of the financial responsibilities of each program to finance the relocation program required by this part.

(e) A provision acknowledging that only those costs directly chargeable to the Federal or federally assisted project are eligible for Federal funds.

(f) A provision for negotiation of major changes that become necessary in the scope, character, or estimated total cost of the work to be performed.

§ 4.235 Amendment of existing agreements required.

Each agreement between a displacing agency and another agency for carrying out relocation assistance functions through the other agency that is in effect on September 1, 1971, shall be amended or supplemented as necessary to include the requirements of § 4.233. The displacing agency shall furnish the Administrator with a copy of the

amended agreement or the existing agreement and the supplement, as the case may be.

Subpart I—Acquisition of Real Property

§ 4.251 Scope.

This subpart prescribes requirements for the acquisition of real property in a Federal or federally-assisted program administered by the Environmental Protection Agency.

§ 4.253 Real property acquisition practices.

(a) In acquiring real property, each displacing agency shall to the greatest extent practicable—

(1) Make every reasonable effort to acquire real property expeditiously through negotiation;

(2) Before the initiation of negotiations have the real property appraised and give the owner or his representative an opportunity to accompany the appraiser during inspection of the property;

(3) Before the initiation of negotiations, establish an amount which it believes to be just compensation for the real property, and make a prompt offer to acquire the property for that amount;

(4) Before requiring any owner to surrender possession of real property—

(i) Pay the agreed purchase price; or
(ii) Deposit with the court, for the benefit of the owner, an amount not less than the agency's approved appraisal of the fair market value of the property; or
(iii) Pay the amount of the award of compensation in a condemnation proceeding for the property;

(5) If interest in real property is to be acquired by exercise of the power of eminent domain, institute formal condemnation proceedings and not intentionally make it necessary for an owner to institute legal proceedings to prove the fact of the taking of his real property; and

(6) If the acquisition of only part of a property would leave its owner with an uneconomic remnant, offer to acquire that remnant.

(b) In acquiring real property, to the greatest extent practicable an agency may not—

(1) Schedule the construction or development of a public improvement that will require any person lawfully occupying real property to move from a dwelling, or to move his business or farm operation, without giving that person at least 90 days' written notice of the date he is required to move;

(2) If it rents acquired real property to the former owner or tenant for short term or subject to termination by the agency on short notice, charge rent that is more than the fair rental value of the property to a short-term occupant;

(3) Advance the time of condemnation;

(4) Defer negotiations, condemnation, or the deposit of funds in court for use of the owner; or

(5) Take any coercive action to compel an owner to agree to a price for his property.

§ 4.255 Statement of just compensation to owner.

At the time it makes an offer to purchase real property, the displacing agency shall provide the owner of that property with a written statement of the basis for the amount estimated to be just compensation. The statement shall include the following:

(a) An identification of the real property and the particular interest being acquired.

(b) A certification, where applicable that any separately held interest in the real property is not being acquired in whole or in part.

(c) An identification of buildings, structures, and other improvements, including fixtures, removable building equipment, and any trade fixtures which are considered to be part of the real property for which the offer of just compensation is made.

(d) An identification of any real property improvements, including fixtures, not owned by the owner of the land.

(e) An identification of the types and approximate quantity of personal property located on the premises that is not being acquired.

(f) A declaration that the agency's determination of just compensation—

(1) Is based on the fair market value of the property;

(2) Is not less than the approved appraised value of the property;

(3) Disregards any decrease or increase in the fair market value caused by the project for which the property is being acquired; and

(4) In the case of separately held interests in the real property, includes an apportionment of the total just compensation for each of those interests.

(g) The amount of damages to any remaining real property.

§ 4.257 Equal interest in improvements to be acquired.

In acquiring any interest in real property each displacing agency shall acquire at least an equal interest in all buildings, structures, or other improvements located on that real property which will be removed or which will be adversely affected by the completed project.

§ 4.259 Payments to tenants for improvements.

(a) In the case of a building, structure, or other improvement owned by a tenant on real property acquired for a project to which this part applies, the displacing agency shall, subject to paragraph (b) of this section, pay the tenant the larger of—

(1) The fair market value of the improvement, assuming its removal from the property; or

(2) The enhancement of the fair market value of the real property.

(b) A payment may not be made to a tenant under paragraph (a) of this section unless—

(1) The tenant, in consideration for the payment, assigns, transfers, and releases to the displacing agency all his right, title, and interest in the improvement;

(2) The owner of the land involved disclaims all interest in the improvement; and

(3) The payment is not duplicated by any payment otherwise authorized by law.

§ 4.261 Expenses incidental to transfer of title.

As soon as possible after real property has been acquired, the displacing agency shall reimburse the owner for—

(a) Recording fees, transfer taxes, and similar expenses incidental to conveying the real property to the agency;

(b) Penalty costs for prepayment of any preexisting recorded mortgage entered into in good faith encumbering the real property; and

(c) The pro rata portion of any prepaid real property taxes which are allocable to a period subsequent to the date of vesting title in the agency or the effective date of possession of the real property by the agency, whichever is the earlier.

§ 4.263 Litigation expenses.

(a) In any condemnation proceeding brought by the displacing agency to acquire real property, it shall reimburse the owner of any right, title, or interest in the real property for his reasonable costs, disbursements, and expenses, including attorney, appraisal, and engineering fees, actually incurred because of the proceeding, if—

(1) The final judgment is that the displacing agency cannot acquire the real property by condemnation; or

(2) The proceeding is abandoned by the displacing agency concerned.

(b) In any inverse condemnation proceeding where the owner of any right, title, or interest in real property receives an award of compensation by judgment or settlement, the displacing agency shall reimburse the plaintiff for his reasonable costs, disbursements, and expenses, including reasonable attorney, appraisal, and engineering fees, actually incurred because of the proceeding.

APPENDIX A—RECORDS

The following list sets forth relocation information which a displacing agency shall maintain for each Federal or federally-assisted project that it administers.

I. General. The displacing agency shall keep a record of the following general information concerning the project:

(1) Project and parcel identification.

(2) Name and address of each displaced person; his new address and telephone number if available.

(3) Dates of all personal contacts made with each displaced person.

(4) Date each displaced person is given notice of relocation payments and services.

(5) Name of agency employee who offers relocation assistance.

(6) Whether the offer of assistance is declined or accepted, and the name of the individual who accepts or declines the offer.

(7) Date each displaced person is required to move.

(8) Date of actual relocation, and whether relocation was accomplished with the assistance of the displacing agency, other agencies, or without assistance.

(9) Type of tenure held by each displaced person before and after relocation.

II. *Displacements from dwellings.* The displacing agency shall keep a record of the following information concerning each individual or family displaced from a dwelling in connection with the project:

(1) Number in family, or number of individuals.

(2) Type of dwelling.

(3) Fair market value, or monthly rent.

(4) Number of rooms.

III. *Displaced businesses.* The displacing agency shall keep a record of the following information concerning each business displaced in connection with the project:

(1) Type of business.

(2) Whether or not relocated.

(3) If relocated, distance moved.

(4) Data supporting a determination that a business cannot be relocated without a substantial loss of its existing patronage and that it is not part of a commercial enterprise having at least one other establishment not being acquired by a State agency or the United States.

IV. *Moving expenses.* The displacing agency shall keep a record of the following information concerning each payment of moving and related expenses in connection with the project:

(1) The date personal property is moved, and the original and new locations of the personal property.

(2) If personal property is stored temporarily—

(a) The place of storage;

(b) The duration of storage; and

(c) A statement of why storage is necessary.

(3) An account of all moving expenses that are supported by receipts or similar evidence of expense;

(4) Amount of reimbursement claimed, amount allowed, and an explanation of any difference.

(5) In the case of a business or farm operation that receives a fixed allowance in lieu of moving expenses, data underlying the computation of such payment.

V. *Replacement housing payments.* The displacing agency shall keep a record of the following information concerning each relocation housing payment made in connection with the project:

(1) The date application for payment is received.

(2) The date application for payment is approved or rejected.

(3) Data substantiating the amount of payment.

(4) If replacement housing is purchased, a copy of the closing statement indicating the purchase price, down payment, and incidental expenses.

(5) Whenever a rental payment is made by annual installment, a statement confirming that the tenant still occupies a decent, safe, and sanitary dwelling.

(6) A copy of the Truth in Lending Statement, or other data, including computations, that confirms the increased interest payment.

PART 20—CERTIFICATION OF FACILITIES

Sec.	
20:1	Applicability.
20:2	Definitions.
20:3	General provisions.
20:4	Notice of intent to certify.
20:5	Applications.
20:6	State certification.
20:7	General policies.
20:8	Requirements for certification.
20:9	Cost recovery.
20:10	Revocation.

AUTHORITY: The provisions of this Part 20 issued pursuant to secs. 301, 704, 80 Stat. 379, 83 Stat. 667; 5 U.S.C. 301, 26 U.S.C. 169.

§ 20.1 Applicability.

The regulations of this part apply to certifications by the Administrator of water or air pollution control facilities for purposes of section 169 of the Internal Revenue Code of 1954, as amended, 26 U.S.C. 169. Applicable regulations of the Department of the Treasury are set forth at 26 CFR 1.169 et seq.

§ 20.2 Definitions.

As used in this part, the following terms shall have the meaning indicated below:

(a) "Act" means, when used in connection with water pollution control facilities, the Federal Water Pollution Control Act, as amended (33 U.S.C. 1151 et seq.) or, when used in connection with air pollution control facilities, the Clean Air Act, as amended (42 U.S.C. 1857 et seq.).

(b) "State certifying authority" means:

(1) For water pollution control facilities, the State health authority, except that, in the case of any State in which there is a single State agency, other than the State health authority, charged with responsibility for enforcing State laws relating to the abatement of water pollution, it means such other State agency; or

(2) For air pollution control facilities, the air pollution control agency designated pursuant to section 302(b)(1) of the Act; or

(3) For both air and water pollution control facilities, any interstate agency authorized to act in place of the certifying agency of a State.

(c) "Applicant" means any person who files an application with the Administrator for certification that a facility is in compliance with the applicable regulations of Federal agencies and in furtherance of the general policies of the United States for cooperation with the States in the prevention and abatement of water or air pollution under the Act.

(d) "Administrator" means the Administrator, Environmental Protection Agency.

(e) "Regional Administrator" means the Regional designee appointed by the Administrator to certify facilities under this part.

(f) "Facility" means property comprising any new identifiable treatment facility which removes, alters, disposes of or stores pollutants, contaminants, wastes, or heat.

(g) "State" means the States, the District of Columbia, the Commonwealth of Puerto Rico, the Canal Zone, Guam, American Samoa, the Virgin Islands, and the Trust Territory of the Pacific Islands.

§ 20.3 General provisions.

(a) An applicant shall file an application in accordance with this part for each separate facility for which certification is sought; *Provided, That one application shall suffice in the case of substantially identical facilities which*

the applicant has installed or plans to install in connection with substantially identical properties; *Provided further, That an application may incorporate by reference material contained in an application previously submitted by the applicant under this part and pertaining to substantially identical facilities.*

(b) The applicant shall, at the time of application to the State certifying authority, submit an application in the form prescribed by the Administrator to the Regional Administrator for the region in which the facility is located.

(c) Applications will be considered complete and will be processed when the Regional Administrator receives the completed State certification.

(d) Applications may be filed prior or subsequent to the commencement of construction, acquisition, installation, or operation of the facility.

(e) An amendment to an application shall be submitted in the same manner as the original application and shall be considered a part of the original application.

(f) If the facility is certified by the Regional Administrator, notice of certification will be issued to the Secretary of the Treasury or his delegate, and a copy of the notice shall be forwarded to the applicant and to the State certifying authority. If the facility is denied certification, the Regional Administrator will advise the applicant and State certifying authority in writing of the reasons therefor.

(g) No certification will be made by the Regional Administrator for any facility prior to the time it is placed in operation and the application, or amended application, in connection with such facility so states.

(h) An applicant may appeal any decision of the Regional Administrator which:

(1) Denies certification;

(2) Disapproves the applicant's suggested method of allocating costs pursuant to § 20.8(e); or

(3) Revokes a certification pursuant to § 20.10.

Any such appeal may be taken by filing with the Administrator within 30 days from the date of the decision of the Regional Administrator a written statement of objections to the decision appealed from. Within 60 days, the Administrator shall affirm, modify, or revoke the decision of the Regional Administrator, stating in writing his reasons therefor.

§ 20.4 Notice of intent to certify.

(a) On the basis of applications submitted prior to the construction, reconstruction, erection, acquisition, or operation of a facility, the Regional Administrator may notify applicants that such facility will be certified if:

(1) The Regional Administrator determines that such facility, if constructed, reconstructed, erected, acquired, installed, and operated in accordance with such application will be in compliance with requirements identified in § 20.8; and if

(2) The application is accompanied by a statement from the State certifying

authority that such facility, if constructed, reconstructed, acquired, erected, installed, and operated in accordance with such application, will be in conformity with the State program or requirements for abatement or control of water or air pollution.

(b) Notice of actions taken under this section will be given to the appropriate State certifying authority.

§ 20.5 Applications.

Applications for certification under this part shall be submitted in such manner as the Administrator may prescribe, shall be signed by the applicant or agent thereof, and shall include the following information:

(a) Name, address, and Internal Revenue Service identifying number of the applicant;

(b) Type and narrative description of the new identifiable facility for which certification is (or will be) sought, including a copy of schematic or engineering drawings, and a description of the function and operation of such facility;

(c) Address (or proposed address) of facility location;

(d) A general description of the operation in connection with which such facility is (or will be) used and a description of the specific process or processes resulting in discharges or emissions which are (or will be) controlled by the facility;

(e) If the facility is (or will be) used in connection with more than one plant or other property, one or more of which were not in operation prior to January 1, 1969, a description of the operations of the facility in respect to each plant or other property, including a reasonable allocation of the costs of the facility among the plants being serviced, and a description of the reasoning and accounting method or methods used to arrive at such allocation;

(f) Description of the effect of such facility in terms of type and quantity of pollutants, contaminants, wastes or heat, removed, altered, stored, or disposed of by such facility;

(g) If the facility performs a function other than removal, alteration, storage, or disposal of pollutants, contaminants, wastes or heat, a description of all functions performed by the facility, including a reasonable identification of the costs of the facility allocable to removal, alteration, storage, or disposal of pollutants, contaminants, wastes or heat, and a description of the reasoning and the accounting method or methods used to arrive at such allocation;

(h) Date when such construction, reconstruction, or erection will be completed or when such facility was (or will be) acquired;

(i) Date when such facility is placed (or is intended to be placed) in operation;

(j) Identification of the applicable State and local water or air pollution control requirements and standards, if any;

(k) Expected useful life of facility;

(l) Cost of construction, acquisition, installation, operation, and maintenance of the facility;

(m) Estimated profits reasonably expected to be derived through the recovery of wastes or otherwise in the operation of the facility over the period referred to in paragraph (a) (6) of 26 CFR 1.169-2;

(n) Such other information as the Administrator deems necessary for certification.

§ 20.6 State certification.

The State certification shall be by the State certifying authority having jurisdiction with respect to the facility in accordance with 26 U.S.C. 169 (d) (1) (A) and (d) (2). The certification shall state that the facility described in the application has been constructed, reconstructed, erected, or acquired in conformity with the State program or requirements for abatement or control of water or air pollution. It shall be executed by an agent or officer authorized to act on behalf of the State certifying authority.

§ 20.7 General policies.

(a) The general policies of the United States for cooperation with the States in the prevention and abatement of water pollution are: To enhance the quality and value of our water resources; to eliminate or reduce the pollution of the nation's waters and tributaries thereof; to improve the sanitary condition of surface and underground waters; and to conserve such waters for public water supplies, propagation of fish and aquatic life and wildlife, recreational purposes, and agricultural, industrial, and other legitimate uses.

(b) The general policy of the United States for cooperation with the States in the prevention and abatement of air pollution is to cooperate with and to assist the States and local governments in protecting and enhancing the quality of the Nation's air resources by the prevention and abatement of conditions which cause or contribute to air pollution which endangers the public health or welfare.

§ 20.8 Requirements for certification.

(a) Subject to § 20.9, the Regional Administrator will certify a facility if he makes the following determinations:

(1) It has been certified by the State certifying authority.

(2) It removes, alters, disposes of, or stores pollutants, contaminants, wastes or heat, which, but for the facility, would be released into the environment.

(3) The applicant is in compliance with all regulations of Federal agencies applicable to use of the facility, including conditions specified in any permit issued to the applicant under section 13 of the Rivers and Harbors Act of 1899, as amended.

(4) The facility furthers the general policies of the United States and the States in the prevention and abatement of pollution.

(5) The applicant has complied with all the other requirements of this part

and has submitted all requested information.

(b) In determining whether use of a facility furthers the general policies of the United States and the States in the prevention and abatement of water pollution, the Regional Administrator shall consider whether such facility is consistent with the following, insofar as they are applicable to the waters which will be affected by the facility:

(1) All applicable water quality standards, including water quality criteria and plans of implementation and enforcement established pursuant to section 10 (c) of the Act or State laws or regulations;

(2) Recommendations issued pursuant to section 10 (e) and (f) of the Act;

(3) Water pollution control programs established pursuant to section 3 or 7 of the Act.

(c) In determining whether use of a facility furthers the general policies of the United States and the States in the prevention and abatement of air pollution, the Regional Administrator shall consider whether such facility is consistent with and meets the following requirements, insofar as they are applicable to the air which will be affected by the facility:

(1) Plans for the implementation, maintenance, and enforcement of ambient air quality standards adopted or promulgated pursuant to section 110 of the Act;

(2) Recommendations issued pursuant to sections 103(e) and 115 of the Act which are applicable to facilities of the same type and located in the area to which the recommendations are directed;

(3) Local government requirements for control of air pollution, including emission standards;

(4) Standards promulgated by the Administrator pursuant to the Act.

(d) A facility which removes elements or compounds from fuels which would be released as pollutants when such fuels are burned may not be certified whether or not such facility is used in connection with the applicant's plant or property where such fuels are burned.

(e) Where a facility is used in connection with more than one plant or other property, one or more of which were not in operation prior to January 1, 1969, or where a facility will perform a function other than the removal, alteration, storage or disposal of pollutants, contaminants, wastes, or heat, the Regional Administrator will so indicate on the notice of certification and will approve or disapprove the applicant's suggested method of allocation of costs. If the Regional Administrator disapproves the applicant's suggested method, he shall identify the proportion of costs allocable to each such plant, or to the removal, alteration, storage or disposal of pollutants, contaminants, wastes, or heat.

§ 20.9 Cost recovery.

Where it appears that, by reason of estimated profits to be derived through the recovery of wastes, through separate

charges for use of the facility in question, or otherwise in the operation of such facility, all or a portion of its costs may be recovered over the period referred to in paragraph (a) (6) of 26 CFR 1.169-2, the Regional Administrator shall so signify in the notice of certification. Determinations as to the meaning of the term "estimated profits" and as to the percentage of the cost of a certified facility which will be recovered over such period shall be made by the Secretary of the Treasury, or his delegate. *Provided*, That in no event shall estimated profits be deemed to arise from the use or reuse by the applicant of recovered waste.

§ 20.10 Revocation.

Certification hereunder may be revoked by the Regional Administrator on 30 days written notice to the applicant, served by certified mail, whenever the Regional Administrator shall determine that the facility in question is no longer being operated consistent with the § 20.8 (b) and (c) criteria in effect at the time the facility was placed in service. Within such 30-day period, the applicant may submit to the Regional Administrator such evidence, data or other written materials as the applicant may deem appropriate to show why the certification hereunder should not be revoked. Notification of a revocation under this section shall be given to the Secretary of the Treasury or his delegate. See 26 CFR 1.169-4(b) (1).

SUBCHAPTER B—GRANTS (RESERVED)

SUBCHAPTER C—AIR PROGRAMS

PART 50—NATIONAL PRIMARY AND SECONDARY AMBIENT AIR QUALITY STANDARDS

Sec.	
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50.10	National primary and secondary ambient air quality standard for hydrocarbons.
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Appendix A	—Reference Method for the Determination of Sulfur Dioxide in the Atmosphere (Pararosaniline Method).
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PART 50—NATIONAL PRIMARY AND SECONDARY AMBIENT AIR QUALITY STANDARDS—Continued

Appendix C	—Reference Method for the Continuous Measurement of Carbon monoxide in the Atmosphere (Non-dispersive Infrared Spectrometry).
Appendix D	—Reference Method for the Measurement of Photochemical Oxidants Corrected for Interferences Due to Nitrogen Oxide and Sulfur Dioxide.
Appendix E	—Reference Method for the Determination of Hydrocarbons Corrected for Methane.
Appendix F	—Reference Method for the Determination of Nitrogen Dioxide (24-Hour Sampling Method).

AUTHORITY: The provisions of this Part 50 issued under sec. 4, Public Law 91-604, 84 Stat. 1679.

§ 50.1 Definitions.

(a) As used in this part, all terms not defined herein shall have the meaning given them by the Act.

(b) "Act" means the Clean Air Act, as amended (42 U.S.C. 1857-1857I, as amended by Pub. L. 91-604).

(c) "Agency" means the Environmental Protection Agency.

(d) "Administrator" means the Administrator of the Environmental Protection Agency.

(e) "Ambient air" means that portion of the atmosphere, external to buildings, to which the general public has access.

(f) "Reference method" means a method of sampling and analyzing for an air pollutant, as described in an appendix to this part.

(g) "Equivalent method" means any method of sampling and analyzing for an air pollutant which can be demonstrated to the Administrator's satisfaction to have a consistent relationship to the reference method.

§ 50.2 Scope.

(a) National primary and secondary ambient air quality standards under section 109 of the Act are set forth in this part.

(b) National primary ambient air quality standards define levels of air quality which the Administrator judges are necessary, with an adequate margin of safety, to protect the public health. National secondary ambient air quality standards define levels of air quality which the Administrator judges necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant. Such standards are subject to revision, and additional primary and secondary standards may be promulgated as the Administrator deems necessary to protect the public health and welfare.

(c) The promulgation of national primary and secondary ambient air quality standards shall not be considered in any manner to allow significant deterioration of existing air quality in any portion of any State.

(d) The proposal, promulgation, or revision of national primary and secondary ambient air quality standards shall not prohibit any State from establishing ambient air quality standards for that State or any portion thereof which are

more stringent than the national standards.

§ 50.3 Reference conditions.

All measurements of air quality are corrected to a reference temperature of 25° C. and to a reference pressure of 760 millimeters of mercury (1,013.2 millibars).

§ 50.4 National primary ambient air quality standards for sulfur oxides (sulfur dioxide).

The national primary ambient air quality standards for sulfur oxides, measured as sulfur dioxide by the reference method described in Appendix A to this part, or by an equivalent method, are:

(a) 80 micrograms per cubic meter (0.03 p.p.m.)—annual arithmetic mean.

(b) 365 micrograms per cubic meter (0.14 p.p.m.)—Maximum 24-hour concentration not to be exceeded more than once per year.

§ 50.5 National secondary ambient air quality standards for sulfur oxides (sulfur dioxide).

The national secondary ambient air quality standards for sulfur oxides, measured as sulfur dioxide by the reference method described in Appendix A to this part, or by an equivalent method, are:

(a) 60 micrograms per cubic meter (0.02 p.p.m.)—annual arithmetic mean.

(b) 260 micrograms per cubic meter (0.1 p.p.m.)—maximum 24-hour concentration not to be exceeded more than once per year, as a guide to be used in assessing implementation plans to achieve the annual standard.

(c) 1,300 micrograms per cubic meter (0.5 p.p.m.)—maximum 3-hour concentration not to be exceeded more than once per year.

§ 50.6 National primary ambient air quality standards for particulate matter.

The national primary ambient air quality standards for particulate matter, measured by the reference method described in Appendix B to this part, or by an equivalent method, are:

(a) 75 micrograms per cubic meter—annual geometric mean.

(b) 260 micrograms per cubic meter—maximum 24-hour concentration not to be exceeded more than once per year.

§ 50.7 National secondary ambient air quality standards for particulate matter.

The national secondary ambient air quality standards for particulate matter, measured by the reference method described in Appendix B to this part, or by an equivalent method, are:

(a) 60 micrograms per cubic meter—annual geometric mean, as a guide to be used in assessing implementation plans to achieve the 24-hour standard.

(b) 150 micrograms per cubic meter—maximum 24-hour concentration not to be exceeded more than once per year.

§ 50.8 National primary and secondary ambient air quality standards for carbon monoxide.

The national primary and secondary ambient air quality standards for carbon monoxide, measured by the reference method described in Appendix C to this part, or by an equivalent method, are:

(a) 10 milligrams per cubic meter (9 p.p.m.)—maximum 8-hour concentration not to be exceeded more than once per year.

(b) 40 milligrams per cubic meter (35 p.p.m.)—maximum 1-hour concentration not to be exceeded more than once per year.

§ 50.9 National primary and secondary ambient air quality standards for photochemical oxidants.

The national primary and secondary ambient air quality standard for photochemical oxidants, measured and corrected for interferences due to nitrogen oxides and sulfur dioxide by the reference method described in Appendix D to this part, or by an equivalent method, is: 160 micrograms per cubic meter (0.08 p.p.m.)—maximum 1-hour concentration not to be exceeded more than once per year.

§ 50.10 National primary and secondary ambient air quality standard for hydrocarbons.

The hydrocarbons standard is for use as a guide in devising implementation plans to achieve oxidant standards.

The national primary and secondary ambient air quality standard for hydrocarbons, measured and corrected for methane by the reference method described in Appendix E to this part, or by an equivalent method, is: 160 micrograms per cubic meter (0.24 p.p.m.)—maximum 3-hour concentration (6 to 9 a.m.) not to be exceeded more than once per year.

§ 50.11 National primary and secondary ambient air quality standard for nitrogen dioxide.

The national primary and secondary ambient air quality standard for nitrogen dioxide, measured by the reference method described in Appendix F to this part, or by an equivalent method, is: 100 micrograms per cubic meter (0.05 p.p.m.)—annual arithmetic mean.

APPENDIX A.—REFERENCE METHOD FOR THE DETERMINATION OF SULFUR DIOXIDE IN THE ATMOSPHERE (PARAROSANILINE METHOD)

1. Principle and Applicability. 1.1 Sulfur dioxide is absorbed from air in a solution of potassium tetrachloromercurate (TCM). A dichlorosulfite-mercurate complex, which resists oxidation by the oxygen in the air, is formed (1, 2). Once formed, this complex is stable to strong oxidants (e.g., ozone, oxides of nitrogen). The complex is reacted with pararosanine and formaldehyde to form intensely colored pararosanine methyl sulfonic acid (3). The absorbance of the solution is measured spectrophotometrically.

1.2 The method is applicable to the measurement of sulfur dioxide in ambient air using sampling periods up to 24 hours.

2. Range and Sensitivity. 2.1 Concentrations of sulfur dioxide in the range of 25 to 1,050 $\mu\text{g}/\text{m}^3$ (0.01 to 0.40 p.p.m.) can be measured under the conditions given. One can

measure concentrations below 25 $\mu\text{g}/\text{m}^3$ by sampling larger volumes of air, but only if the absorption efficiency of the particular system is first determined. Higher concentrations can be analyzed by using smaller gas samples, a larger collection volume, or a suitable aliquot of the collected sample. Beer's Law is followed through the working range from 0.03 to 1.0 absorbance units (0.8 to 27 μg of sulfite ion in 25 ml. final solution computed as SO_2).

2.2 The lower limit of detection of sulfur dioxide in 10 ml. TCM is 0.75 μg . (based on twice the standard deviation) representing a concentration of 25 $\mu\text{g}/\text{m}^3\text{SO}_2$ (0.01 p.p.m.) in an air sample of 30 liters.

3. Interferences. 3.1 The effects of the principal known interferences have been minimized or eliminated. Interferences by oxides of nitrogen are eliminated by sulfamic acid (4, 5), ozone by time-delay (6), and heavy metals by EDTA (ethylenediaminetetraacetic acid, disodium salt) and phosphoric acid (4, 6). At least 60 μg . Fe (III), 10 μg . Mn (II), and 10 μg . Cr (III) in 10 ml. absorbing reagent can be tolerated in the procedure. No significant interference was found with 10 μg . Cu (II) and 22 μg . V (V).

4. Precision, Accuracy, and Stability. 4.1 Relative standard deviation at the 95 percent confidence level is 4.6 percent for the analytical procedure using standard samples. (5)

4.2 After sample collection the solutions are relatively stable. At 22° C. losses of sulfur dioxide occur at the rate of 1 percent per day. When samples are stored at 5° C. for 30 days, no detectable losses of sulfur dioxide occur. The presence of EDTA enhances the stability of SO_2 in solution, and the rate of decay is independent of the concentration of SO_2 . (7)

5. Apparatus.

5.1 Sampling.

5.1.1 Absorber. Absorbers normally used in air pollution sampling are acceptable for concentrations above 25 $\mu\text{g}/\text{m}^3$ (0.01 p.p.m.). An all-glass midjet impinger, as shown in Figure A1, is recommended for 30-minute and 1-hour samples.

For 24-hour sampling, assemble an absorber from the following parts:

Polypropylene 2-port tube closures, special manufacture (available from Bel-Art Products, Pequannock, N.J.).

Glass impingers, 6 mm. tubing, 6 inches long, one end drawn to small diameter such that No. 79 jewelers drill will pass through, but No. 78 jewelers drill will not. (Other end fire polished.)

Polypropylene tubes, 164 by 32 mm. (Nalgene or equal).

5.1.2 Pump. Capable of maintaining an air pressure differential greater than 0.7 atmosphere at the desired flow rate.

5.1.3 Air Flowmeter or Critical Orifices. A calibrated rotameter or critical orifice capable of measuring air flow within ± 2 percent. For 30-minute sampling, a 22-gauge hypodermic needle 1 inch long may be used as a critical orifice to give a flow of about 1 liter/minute. For 1-hour sampling, a 23-gauge hypodermic needle five-eighths of an inch long may be used as a critical orifice to give a flow of about 0.5 liter/minute. For 24 hour sampling, a 27-gauge hypodermic needle three-eighths of an inch long may be used to give a flow of about 0.2 liter/minute. Use a membrane filter to protect the needle (Figure A1a).

5.2 Analysis.

$$2.80 = \frac{10^4(\text{conversion of g. to mg.}) \times 0.1 (\text{fraction iodate used})}{35.67 (\text{equivalent weight of potassium iodate})}$$

5.2.1 Spectrophotometer. Suitable for measurement of absorbance at 548 nm. with an effective spectral band width of less than 15 nm. Reagent blank problems may occur with spectrophotometers having greater spectral band width. The wavelength calibration of the instrument should be verified. If transmittance is measured, this can be converted to absorbance:

$$A = \log_{10} (1/T)$$

6. Reagents.

6.1 Sampling.

6.1.1 Distilled water. Must be free from oxidants.

6.1.2 Absorbing Reagent [0.04 M Potassium Tetrachloromercurate (TCM)]. Dissolve 10.86 g. mercuric chloride, 0.066 g. EDTA (ethylenediaminetetraacetic acid, disodium salt), and 6.0 g. potassium chloride in water and bring to mark in a 1,000-ml. volumetric flask. (Caution: highly poisonous. If spilled on skin, flush off with water immediately). The pH of this reagent should be approximately 4.0, but it has been shown that there is no appreciable difference in collection efficiency over the range of pH 5 to pH 3.(7) The absorbing reagent is normally stable for 6 months. If a precipitate forms, discard the reagent.

6.2 Analysis.

6.2.1 Sulfamic Acid (0.6 percent). Dissolve 0.6 g. sulfamic acid in 100 ml. distilled water. Prepare fresh daily.

6.2.2 Formaldehyde (0.2 percent). Dilute 5 ml. formaldehyde solution (38-38 percent) to 1,000 ml. with distilled water. Prepare daily.

6.2.3 Stock Iodine Solution (0.1 N). Place 12.7 g. iodine in a 250-ml. beaker; add 40 g. potassium iodide and 25 ml. water. Stir until all is dissolved, then dilute to 1,000 ml. with distilled water.

6.2.4 Iodine Solution (0.01 N). Prepare approximately 0.01 N iodine solution by diluting 50 ml. of stock solution to 500 ml. with distilled water.

6.2.5 Starch Indicator Solution. Triturate 0.4 g. soluble starch and 0.002 g. mercuric iodide (preservative) with a little water, and add the paste slowly to 200 ml. boiling water. Continue boiling until the solution is clear; cool, and transfer to a glass-stoppered bottle.

6.2.6 Stock Sodium Thiosulfate Solution (0.1 N). Prepare a stock solution by dissolving 25 g. sodium thiosulfate ($\text{Na}_2\text{S}_2\text{O}_3 \cdot 5\text{H}_2\text{O}$) in 1,000 ml. freshly boiled, cooled, distilled water and add 0.1 g. sodium carbonate to the solution. Allow the solution to stand 1 day before standardizing. To standardize, accurately weigh, to the nearest 0.1 mg., 1.5 g. primary standard potassium iodate dried at 180° C. and dilute to volume in a 500-ml. volumetric flask. To a 500-ml. iodine flask, pipet 50 ml. of iodate solution. Add 2 g. potassium iodide and 10 ml. of 1 N hydrochloric acid. Stopper the flask. After 5 minutes, titrate with stock thiosulfate solution to a pale yellow. Add 5 ml. starch indicator solution and continue the titration until the blue color disappears. Calculate the normality of the stock solution:

$$N = \frac{W}{M} \times 2.80$$

N=Normality of stock thiosulfate solution.

M=Volume of thiosulfate required, ml.

W=Weight of potassium iodate, grams.

6.2.7 *Sodium Thiosulfate Titrant (0.01 N)*. Dilute 100 ml. of the stock thiosulfate solution to 1,000 ml. with freshly boiled distilled water.

Normality = Normality of stock solution $\times 0.100$.

6.2.8 *Standardized Sulfite Solution for Preparation of Working Sulfite-TCM Solution*. Dissolve 0.3 g. sodium metabisulfite ($\text{Na}_2\text{S}_2\text{O}_5$) or 0.40 g. sodium sulfite (Na_2SO_3) in 500 ml. of recently boiled, cooled, distilled water. (Sulfite solution is unstable; it is therefore important to use water of the highest purity to minimize this instability.) This solution contains the equivalent of 320 to 400 $\mu\text{g.}/\text{ml.}$ of SO_2 . The actual concentration of the solution is determined by adding excess iodine and back-titrating with standard sodium thiosulfate solution. To back-titrate, pipet 50 ml. of the 0.01 N iodine into each of two 500-ml. iodine flasks (A and B). To flask A (blank) add 25 ml. distilled water, and to flask B (sample) pipet 25 ml. sulfite solution. Stopper the flasks and allow to react for 5 minutes. Prepare the working sulfite-TCM solution (6.2.9) at the same time iodine solution is added to the flasks. By means of a buret containing standardized 0.01 N thiosulfate, titrate each flask in turn to a pale yellow. Then add 5 ml. starch solution and continue the titration until the blue color disappears.

6.2.9 *Working Sulfite-TCM Solution*. Pipet accurately 2 ml. of the standard solution into a 100 ml. volumetric flask and bring to mark with 0.04 M TCM. Calculate the concentration of sulfur dioxide in the working solution:

$$\mu\text{g SO}_2/\text{ml.} = \frac{(A - B)(N)(32,000)}{25} \times 0.02$$

A = Volume thiosulfate for blank, ml.

B = Volume thiosulfate for sample, ml.

N = Normality of thiosulfate titrant.

32,000 = Milliequivalent wt. of SO_2 , $\mu\text{g.}$

25 = Volume standard sulfite solution, ml.

0.02 = Dilution factor.

This solution is stable for 30 days if kept at 5° C. (refrigerator). If not kept at 5° C., prepare daily.

6.2.10 *Purified Pararosaniline Stock Solution (0.2 percent nominal)*.

6.2.10.1 *Dye Specifications*. The pararosaniline dye must meet the following performance specifications: (1) the dye must have a wavelength of maximum absorbance at 540 nm. when assayed in a buffered solution of 0.1 M sodium acetate-acetic acid; (2) the absorbance of the reagent blank, which is temperature-sensitive (0.015 absorbance unit/°C), should not exceed 0.170 absorbance unit at 22° C. with a 1-cm. optical path length, when the blank is prepared according to the prescribed analytical procedure and to the specified concentration of the dye; (3) the calibration curve (Section 8.2.1) should have a slope of 0.030 ± 0.002 absorbance units/ $\mu\text{g. SO}_2$ at this path length when the dye is pure and the sulfite solution is properly standardized.

6.2.10.2 *Preparation of Stock Solution*. A specially purified (99-100 percent pure) solution of pararosaniline, which meets the above specifications, is commercially available in the required 0.20 percent concentration (Harleco®). Alternatively, the dye may be purified, a stock solution prepared and then assayed according to the procedure of Scaringelli, et al. (4)

6.2.11 *Pararosaniline Reagent*. To a 250-ml. volumetric flask, add 20 ml. stock pararosaniline solution. Add an additional 0.2

ml. stock solution for each percent the stock assays below 100 percent. Then add 25 ml. 3 M phosphoric acid and dilute to volume with distilled water. This reagent is stable for at least 9 months.

7. Procedure.

7.1 *Sampling*. Procedures are described for short-term (30 minutes and 1 hour) and for long-term (24 hours) sampling. One can select different combinations of sampling rate and time to meet special needs. Sample volumes should be adjusted, so that linearity is maintained between absorbance and concentration over the dynamic range.

7.1.1 *30-Minute and 1-Hour Samplings*. Insert a midjet impinger into the sampling system, Figure A1. Add 10 ml. TCM solution to the impinger. Collect sample at 1 liter/minute for 30 minutes, or at 0.5 liter/minute for 1 hour, using either a rotameter, as shown in Figure A1, or a critical orifice, as shown in Figure A1a, to control flow. Shield the absorbing reagent from direct sunlight during and after sampling by covering the impinger with aluminum foil, to prevent deterioration. Determine the volume of air sampled by multiplying the flow rate by the time in minutes and record the atmospheric pressure and temperature. Remove and stopper the impinger. If the sample must be stored for more than a day before analysis, keep it at 5° C. in a refrigerator (see 4.2).

7.1.2 *24-Hour Sampling*. Place 50 ml. TCM solution in a large absorber and collect the sample at 0.2 liter/minute for 24 hours from midnight to midnight. Make sure no entrainment of solution results with the impinger. During collection and storage protect from direct sunlight. Determine the total air volume by multiplying the air flow rate by the time in minutes. The correction of 24-hour measurements for temperature and pressure is extremely difficult and is not ordinarily done. However, the accuracy of the measurement will be improved if meaningful corrections can be applied. If storage is necessary, refrigerate at 5° C. (see 4.2).

7.2 Analysis.

7.2.1 *Sample Preparation*. After collection, if a precipitate is observed in the sample, remove it by centrifugation.

7.2.1.1 *30-Minute and 1-Hour Samples*. Transfer the sample quantitatively to a 25-ml. volumetric flask; use about 5 ml. distilled water for rinsing. Delay analyses for 20 minutes to allow any ozone to decompose.

7.2.1.2 *24-Hour Sample*. Dilute the entire sample to 50 ml. with absorbing solution. Pipet 5 ml. of the sample into a 25-ml. volumetric flask for chemical analyses. Bring volume to 10 ml. with absorbing reagent. Delay analyses for 20 minutes to allow any ozone to decompose.

7.2.2 *Determination*. For each set of determinations prepare a reagent blank by adding 10 ml. unexposed TCM solution to a 25-ml. volumetric flask. Prepare a control solution by adding 2 ml. of working sulfite-TCM solution and 8 ml. TCM solution to a 25-ml. volumetric flask. To each flask containing either sample, control solution, or reagent blank, add 1 ml. 0.6 percent sulfamic acid and allow to react 10 minutes to destroy the nitrite from oxides of nitrogen. Accurately pipet in 2 ml. 0.2 percent formaldehyde solution, then 5 ml. pararosaniline solution. Start a laboratory timer that has been set for 30 minutes. Bring all flasks to volume with freshly boiled and cooled distilled water and mix thoroughly. After 30 minutes and before 60 minutes, determine the absorbances of the sample (denote as A), reagent blank (denote as A₀) and the control solution at 548 nm. using 1-cm. optical path length cells. Use distilled water, not the reagent blank, as the reference. (NOTE! This is important because of the color sensitivity of the reagent blank to tempera-

ture changes which can be induced in the cell compartment of a spectrophotometer.) Do not allow the colored solution to stand in the absorbance cells, because a film of dye may be deposited. Clean cells with alcohol after use. If the temperature of the determinations does not differ by more than 2° C. from the calibration temperature (8.2), the reagent blank should be within 0.03 absorbance unit of the y-intercept of the calibration curve (8.2). If the reagent blank differs by more than 0.03 absorbance unit from that found in the calibration curve, prepare a new curve.

7.2.3 *Absorbance Range*. If the absorbance of the sample solution ranges between 1.0 and 2.0, the sample can be diluted 1:1 with a portion of the reagent blank and read within a few minutes. Solutions with higher absorbance can be diluted up to sixfold with the reagent blank in order to obtain on-scale readings within 10 percent of the true absorbance value.

8. Calibration and Efficiencies.

8.1 *Flowmeters and Hypodermic Needle*. Calibrate flowmeters and hypodermic needle (8) against a calibrated wet test meter.

8.2 Calibration Curves.

8.2.1 *Procedure with Sulfite Solution*. Accurately pipet graduated amounts of the working sulfite-TCM solution (6.2.9) (such as 0, 0.5, 1, 2, 3, and 4 ml.) into a series of 25-ml. volumetric flasks. Add sufficient TCM solution to each flask to bring the volume to approximately 10 ml. Then add the remaining reagents as described in 7.2.2. For maximum precision use a constant-temperature bath. The temperature of calibration must be maintained within $\pm 1^\circ\text{C.}$ and in the range of 20° to 30° C. The temperature of calibration and the temperature of analysis must be within 2 degrees. Plot the absorbance against the total concentration in $\mu\text{g. SO}_2$ for the corresponding solution. The total $\mu\text{g. SO}_2$ in solution equals the concentration of the standard (Section 6.2.9) in $\mu\text{g. SO}_2/\text{ml.}$ times the ml. sulfite solution added ($\mu\text{g. SO}_2 = \mu\text{g.}/\text{ml. SO}_2 \times \text{ml. added}$). A linear relationship should be obtained, and the y-intercept should be within 0.03 absorbance unit of the zero standard absorbance. For maximum precision determine the line of best fit using regression analysis by the method of least squares. Determine the slope of the line of best fit, calculate its reciprocal and denote as B₀. B₀ is the calibration factor. (See Section 6.2.10.1 for specifications on the slope of the calibration curve). This calibration factor can be used for calculating results provided there are no radical changes in temperature or pH. At least one control sample containing a known concentration of SO_2 for each series of determinations, is recommended to insure the reliability of this factor.

8.2.2 *Procedure with SO_2 Permeation Tubes*.

8.2.2.1 *General Considerations*. Atmospheres containing accurately known amounts of sulfur dioxide at levels of interest can be prepared using permeation tubes. In the systems for generating these atmospheres, the permeation tube emits SO_2 gas at a known, low, constant rate, provided the temperature of the tube is held constant ($\pm 0.1^\circ\text{C.}$) and provided the tube has been accurately calibrated at the temperature of use. The SO_2 gas permeating from the tube is carried by a low flow of inert gas to a mixing chamber where it is accurately diluted with SO_2 -free air to the level of interest and the sample taken. These systems are shown schematically in Figures A2 and A3 and have been described in detail by O'Keefe and Ortman (9), Scaringelli, Frey, and Saltzman (10), and Scaringelli, O'Keefe, Rosenberg, and Bell (11).

8.2.2.2 *Preparation of Standard Atmospheres*. Permeation tubes may be prepared

*Hartmen-Leddon, 60th and Woodland Avenue, Philadelphia, PA 19143.

or purchased. Scaringelli, O'Keeffe, Rosenberg, and Bell (11) give detailed, explicit directions for permeation tube calibration. Tubes with a certified permeation rate are available from the National Bureau of Standards. Tube permeation rates from 0.2 to 0.4 $\mu\text{g./minute}$, inert gas flows of about 50 ml./minute, and dilution air flow rates from 1.1 to 15 liters/minute conveniently give standard atmospheres containing desired levels of SO_2 (25 to 390 $\mu\text{g./m.}^3$; 0.01 to 0.15 p.p.m. SO_2). The concentration of SO_2 in any standard atmosphere can be calculated as follows:

$$C = \frac{P \times 10^3}{R_2 + R_1}$$

Where:

C = Concentration of SO_2 , $\mu\text{g./m.}^3$ at reference conditions.

P = Tube permeation rate, $\mu\text{g./minute}$.

R_2 = Flow rate of dilution air, liter/minute at reference conditions.

R_1 = Flow rate of inert gas, liter/minute at reference conditions.

8.2.2.3 *Sampling and Preparation of Calibration Curve.* Prepare a series (usually six) of standard atmospheres containing SO_2 levels from 25 to 390 $\mu\text{g./m.}^3$. Sample each atmosphere using similar apparatus and taking exactly the same air volume as will be done in atmospheric sampling. Determine absorbances as directed in 7.2. Plot the concentration of SO_2 in $\mu\text{g./m.}^3$ (x-axis) against $A - A_0$ values (y-axis), draw the straight line of best fit and determine the slope. Alternatively, regression analysis by the method of least squares may be used to calculate the slope. Calculate the reciprocal of the slope and denote as B_s .

8.3 *Sampling Efficiency.* Collection efficiency is above 98 percent; efficiency may fall off, however, at concentrations below 25 $\mu\text{g./m.}^3$. (12, 13)

9. Calculations.

9.1 *Conversion of Volume.* Convert the volume of air sampled to the volume at reference conditions of 25° C. and 760 mm. Hg. (On 24-hour samples, this may not be possible.)

$$V_a = V \times \frac{P}{760} \times \frac{298}{t + 273}$$

V_a = Volume of air at 25° C. and 760 mm. Hg, liters.

V = Volume of air sampled, liters.

P = Barometric pressure, mm. Hg.

t = Temperature of air sample, °C.

9.2 *Sulfur Dioxide Concentration.*

9.2.1 When sulfite solutions are used to prepare calibration curves, compute the concentration of sulfur dioxide in the sample:

$$\mu\text{g. SO}_2/\text{m.}^3 = \frac{(A - A_0) (10^3) (B_s)}{V_a} \times D$$

A = Sample absorbance.

A_0 = Reagent blank absorbance.

10^3 = Conversion of liters to cubic meters.

V_a = The sample corrected to 25° C. and 760 mm. Hg, liters.

B_s = Calibration factor, $\mu\text{g./absorbance unit}$.

D = Dilution factor.

For 30-minute and 1-hour samples,

D = 1.

For 24-hour samples, D = 10.

9.2.2 When SO_2 gas standard atmospheres are used to prepare calibration curves, compute the sulfur dioxide in the sample by the following formula:

$$\text{SO}_2, \mu\text{g./m.}^3 = (A - A_0) \times B_s$$

A = Sample absorbance.

A_0 = Reagent blank absorbance.

B_s = (See 8.2.2.3).

9.2.3 *Conversion of $\mu\text{g./m.}^3$ to p.p.m.* = If desired, the concentration of sulfur dioxide may be calculated as p.p.m. SO_2 at reference conditions as follows:

$$\text{p.p.m. SO}_2 = \mu\text{g. SO}_2/\text{m.}^3 \times 3.82 \times 10^{-4}$$

10. References.

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- (10) Scaringelli, F. P., Frey, S. A., and Saltzman, B. E., "Evaluation of Teflon Permeation Tubes for Use with Sulfur Dioxide", *Amer. Ind. Hygiene Assoc. J.* 28, 260 (1967).
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- (12) Urone, P., Evans, J. B., and Noyes, C. M., "Tracer Techniques in Sulfur Dioxide Colorimetric and Conductometric Methods", *Anal. Chem.* 37, 1104 (1965).
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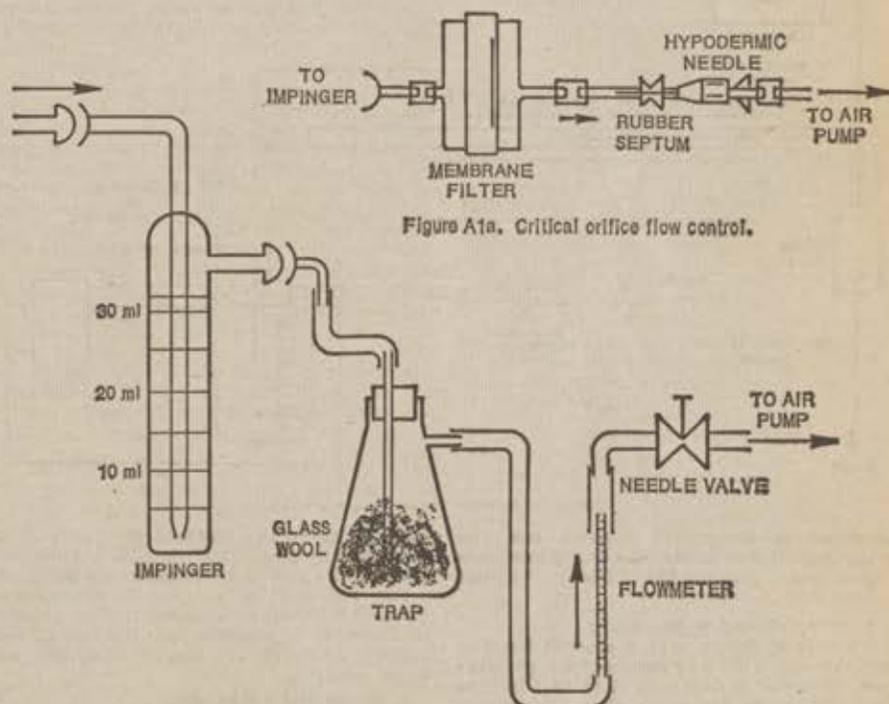


Figure A1. Sampling train.

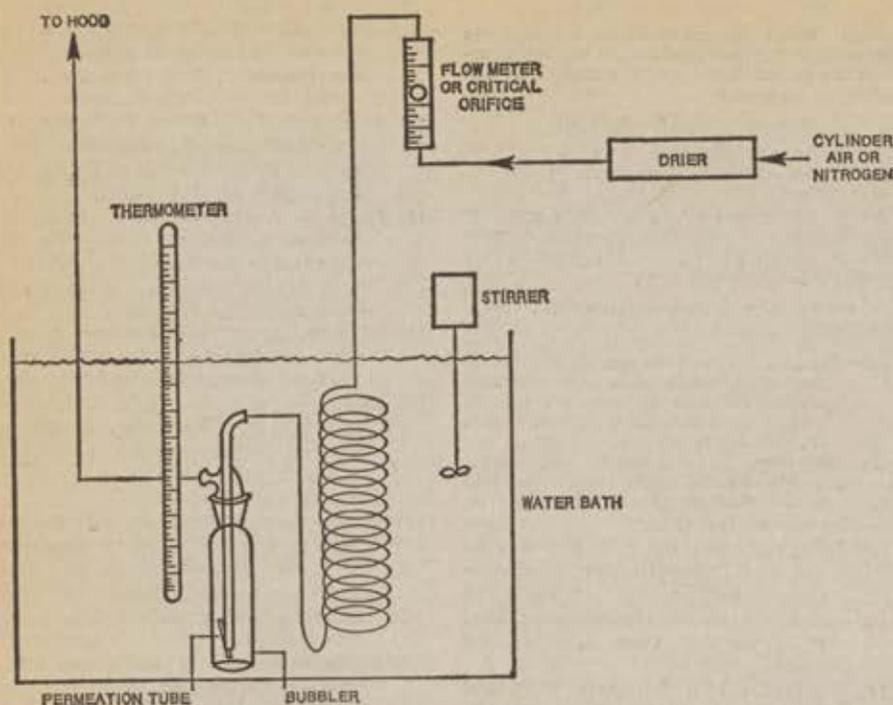


Figure A2. Apparatus for gravimetric calibration and field use.

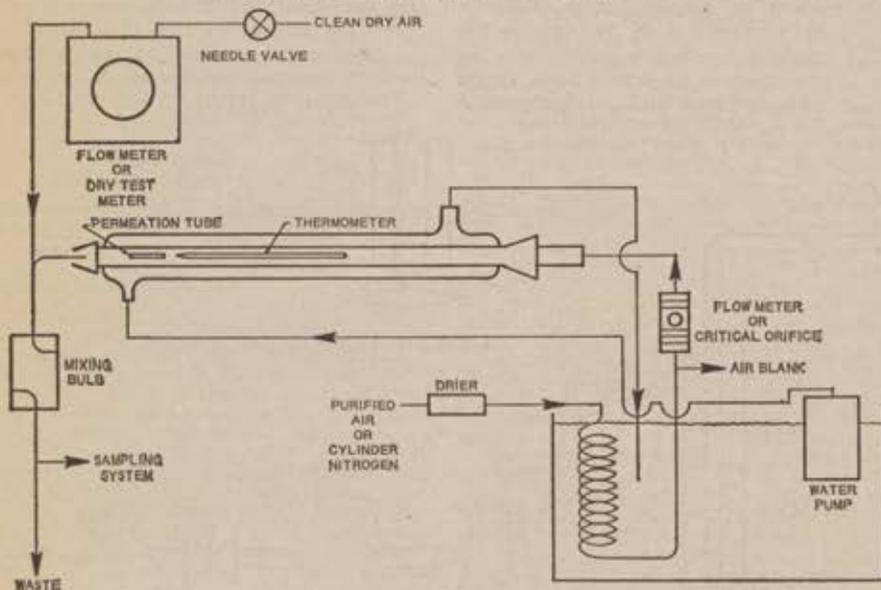


Figure A3. Permeation tube schematic for laboratory use.

APPENDIX B—REFERENCE METHOD FOR THE DETERMINATION OF SUSPENDED PARTICULATES IN THE ATMOSPHERE (HIGH VOLUME METHOD)

1. Principle and Applicability.

1.1 Air is drawn into a covered housing and through a filter by means of a high-flow-rate blower at a flow rate (1.13 to 1.70 m³/min.; 40 to 60 ft.³/min.) that allows suspended particulates having diameters of less than 100 μ m. (Stokes equivalent diameter) to pass to the filter surface. (1) Particles within the size range of 100 to 0.1 μ m. diameter are ordinarily collected on glass fiber filters. The mass concentration of suspended

particulates in the ambient air (μ g./m.³) is computed by measuring the mass of collected particulates and the volume of air sampled.

1.2 This method is applicable to measurement of the mass concentration of suspended particulates in ambient air. The size of the sample collected is usually adequate for other analyses.

2. Range and Sensitivity.

2.1 When the sampler is operated at an average flow rate of 1.70 m³/min. (60 ft.³/min.) for 24 hours, an adequate sample will be obtained even in an atmosphere having concentrations of suspended particulates as low as 1 μ g./m.³. If particulate levels are

unusually high, a satisfactory sample may be obtained in 6 to 8 hours or less. For determination of average concentrations of suspended particulates in ambient air, a standard sampling period of 24 hours is recommended.

2.2 Weights are determined to the nearest milligram, airflow rates are determined to the nearest 0.03 m³/min. (1.0 ft.³/min.), times are determined to the nearest 2 minutes, and mass concentrations are reported to the nearest microgram per cubic meter.

3. Interferences.

3.1 Particulate matter that is oily, such as photochemical smog or wood smoke, may block the filter and cause a rapid drop in airflow at a nonuniform rate. Dense fog or high humidity can cause the filter to become too wet and severely reduce the airflow through the filter.

3.2 Glass-fiber filters are comparatively insensitive to changes in relative humidity, but collected particulates can be hygroscopic. (2)

4. Precision, Accuracy, and Stability.

4.1 Based upon collaborative testing, the relative standard deviation (coefficient of variation) for single analyst variation (repeatability of the method) is 3.0 percent. The corresponding value for multilaboratory variation (reproducibility of the method) is 3.7 percent. (3)

4.2 The accuracy with which the sampler measures the true average concentration depends upon the constancy of the airflow rate through the sampler. The airflow rate is affected by the concentration and the nature of the dust in the atmosphere. Under these conditions the error in the measured average concentration may be in excess of ± 50 percent of the true average concentration, depending on the amount of reduction of airflow rate and on the variation of the mass concentration of dust with time during the 24-hour sampling period. (4)

5. Apparatus.

5.1 Sampling.

5.1.1 *Sampler.* The sampler consists of three units: (1) the faceplate and gasket, (2) the filter adapter assembly, and (3) the motor unit. Figure B1 shows an exploded view of these parts, their relationship to each other, and how they are assembled. The sampler must be capable of passing environmental air through a 406.5 cm.³ (63 in.³) portion of a clean 20.3 by 25.4 cm. (8- by 10-in.) glass-fiber filter at a rate of at least 1.70 m³/min. (60 ft.³/min.). The motor must be capable of continuous operation for 24-hour periods with input voltages ranging from 110 to 120 volts, 50-60 cycles alternating current and must have third-wire safety ground. The housing for the motor unit may be of any convenient construction so long as the unit remains airtight and leak-free. The life of the sampler motor can be extended by lowering the voltage by about 10 percent with a small "buck or boost" transformer between the sampler and power outlet.

5.1.2 *Sampler Shelter.* It is important that the sampler be properly installed in a suitable shelter. The shelter is subjected to extremes of temperature, humidity, and all types of air pollutants. For these reasons the materials of the shelter must be chosen carefully. Properly painted exterior plywood or heavy gauge aluminum serve well. The sampler must be mounted vertically in the shelter so that the glass-fiber filter is parallel with the ground. The shelter must be provided with a roof so that the filter is protected from precipitation and debris. The internal arrangement and configuration of a suitable shelter with a gable roof are shown in Figure B2. The clearance area between the

main housing and the roof at its closest point should be 590.5 ± 193.5 cm.² (90 ± 30 in.²). The main housing should be rectangular, with dimensions of about 29 by 36 cm. ($11\frac{1}{2}$ by 14 in.).

5.1.3 *Rotameter*. Marked in arbitrary units, frequently 0 to 70, and capable of being calibrated. Other devices of at least comparable accuracy may be used.

5.1.4 *Orifice Calibration Unit*. Consisting of a metal tube 7.6 cm. (3 in.) ID and 15.9 cm. ($6\frac{1}{4}$ in.) long with a static pressure tap 5.1 cm. (2 in.) from one end. See Figure B3. The tube end nearest the pressure tap is flanged to about 10.8 cm. ($4\frac{1}{4}$ in.) OD with a male thread of the same size as the inlet end of the high-volume air sampler. A single metal plate 9.2 cm. ($3\frac{3}{8}$ in.) in diameter and 0.24 cm. ($\frac{3}{32}$ in.) thick with a central orifice 2.9 cm. ($1\frac{1}{8}$ in.) in diameter is held in place at the air inlet end with a female threaded ring. The other end of the tube is flanged to hold a loose female threaded coupling, which screws onto the inlet of the sampler. An 18-hole metal plate, an integral part of the unit, is positioned between the orifice and sampler to simulate the resistance of a clean glass-fiber filter. An orifice calibration unit is shown in Figure B3.

5.1.5 *Differential Manometer*. Capable of measuring to at least 40 cm. (16 in.) of water.

5.1.6 *Positive Displacement Meter*. Calibrated in cubic meters or cubic feet, to be used as a primary standard.

5.1.7 *Barometer*. Capable of measuring atmospheric pressure to the nearest mm.

5.2 Analysis.

5.2.1 *Filter Conditioning Environment*. Balance room or desiccator maintained at 15° to 35° C. and less than 50 percent relative humidity.

5.2.2 *Analytical Balance*. Equipped with a weighing chamber designed to handle unfolded 20.3 by 25.4 cm. (8- by 10-in.) filters and having a sensitivity of 0.1 mg.

5.2.3 *Light Source*. Frequently a table of the type used to view X-ray films.

5.2.4 *Numbering Device*. Capable of printing identification numbers on the filters.

6. Reagents.

6.1 *Filter Media*. Glass-fiber filters having a collection efficiency of at least 99 percent for particles of 0.3μ m diameter, as measured by the DOP test, are suitable for the quantitative measurement of concentrations of suspended particulates, (5) although some other medium, such as paper, may be desirable for some analyses. If a more detailed analysis is contemplated, care must be exercised to use filters that contain low background concentrations of the pollutant being investigated. Careful quality control is required to determine background values of these pollutants.

7. Procedure.

7.1 Sampling.

7.1.1 *Filter Preparation*. Expose each filter to the light source and inspect for pinholes, particles, or other imperfections. Filters with visible imperfections should not be used. A small brush is useful for removing particles. Equilibrate the filters in the filter conditioning environment for 24 hours. Weigh the filters to the nearest milligram; record tare weight and filter identification number. Do not bend or fold the filter before collection of the sample.

7.1.2 *Sample Collection*. Open the shelter, loosen the wing nuts, and remove the faceplate from the filter holder. Install a numbered, preweighed, glass-fiber filter in position (rough side up), replace the faceplate without disturbing the filter, and fasten securely. Undertightening will allow air leakage, overtightening will damage the sponge-rubber faceplate gasket. A very light application of talcum powder may be used on the sponge-rubber faceplate gasket to prevent the filter from sticking. During inclement

weather the sampler may be removed to a protected area for filter change. Close the roof of the shelter, run the sampler for about 5 minutes, connect the rotameter to the nipple on the back of the sampler, and read the rotameter ball with rotameter in a vertical position. Estimate to the nearest whole number. If the ball is fluctuating rapidly, tip the rotameter and slowly straighten it until the ball gives a constant reading. Disconnect the rotameter from the nipple; record the initial rotameter reading and the starting time and date on the filter folder. (The rotameter should never be connected to the sampler except when the flow is being measured.) Sample for 24 hours from midnight to midnight and take a final rotameter reading. Record the final rotameter reading and ending time and date on the filter folder. Remove the faceplate as described above and carefully remove the filter from the holder, touching only the outer edges. Fold the filter lengthwise so that only surfaces with collected particulates are in contact, and place in a manila folder. Record on the folder the filter number, location, and any other factors, such as meteorological conditions or razing of nearby buildings, that might affect the results. If the sample is defective, void it at this time. In order to obtain a valid sample, the high-volume sampler must be operated with the same rotameter and tubing that were used during its calibration.

7.2 *Analysis*. Equilibrate the exposed filters for 24 hours in the filter conditioning environment, then reweigh. After they are weighed, the filters may be saved for detailed chemical analysis.

7.3 Maintenance.

7.3.1 *Sampler Motor*. Replace brushes before they are worn to the point where motor damage can occur.

7.3.2 *Faceplate Gasket*. Replace when the margins of samples are no longer sharp. The gasket may be sealed to the faceplate with rubber cement or double-sided adhesive tape.

7.3.3 *Rotameter*. Clean as required, using alcohol.

8. Calibration.

8.1 *Purpose*. Since only a small portion of the total air sampled passes through the rotameter during measurement, the rotameter must be calibrated against actual airflow with the orifice calibration unit. Before the orifice calibration unit can be used to calibrate the rotameter, the orifice calibration unit itself must be calibrated against the positive displacement primary standard.

8.1.1 *Orifice Calibration Unit*. Attach the orifice calibration unit to the intake end of the positive displacement primary standard and attach a high-volume motor blower unit to the exhaust end of the primary standard. Connect one end of a differential manometer to the differential pressure tap of the orifice calibration unit and leave the other end open to the atmosphere. Operate the high-volume motor blower unit so that a series of different, but constant, airflows (usually six) are obtained for definite time periods. Record the reading on the differential manometer at each airflow. The different constant airflows are obtained by placing a series of loadplates, one at a time, between the calibration unit and the primary standard. Placing the orifice before the inlet reduces the pressure at the inlet of the primary standard below atmospheric; therefore, a correction must be made for the increase in volume caused by this decreased inlet pressure. Attach one end of a second differential manometer to an inlet pressure tap of the primary standard and leave the other open to the atmosphere. During each of the constant airflow measurements made above, measure the true inlet pressure of the primary standard with this second differential manometer. Measure atmospheric pressure and temperature. Correct the measured

air volume to true air volume as directed in 9.1.1, then obtain true airflow rate, Q , as directed in 9.1.3. Plot the differential manometer readings of the orifice unit versus Q .

8.1.2 *High-Volume Sampler*. Assemble a high-volume sampler with a clean filter in place and run for at least 5 minutes. Attach a rotameter, read the ball, adjust so that the ball reads 65, and seal the adjusting mechanism so that it cannot be changed easily. Shut off motor, remove the filter, and attach the orifice calibration unit in its place. Operate the high-volume sampler at a series of different, but constant, airflows (usually six). Record the reading of the differential manometer on the orifice calibration unit, and record the readings of the rotameter at each flow. Measure atmospheric pressure and temperature. Convert the differential manometer reading to $m^3/min.$, Q , then plot rotameter reading versus Q .

8.1.3 *Correction for Differences in Pressure or Temperature*. See Addendum B.

9. Calculations.

9.1 Calibration of Orifice.

9.1.1 *True Air Volume*. Calculate the air volume measured by the positive displacement primary standard.

$$V_s = \frac{(P_s - P_m)}{P_s} (V_M)$$

V_s = True air volume at atmospheric pressure, m^3

P_s = Barometric pressure, mm. Hg.

P_m = Pressure drop at inlet of primary standard, mm. Hg.

V_M = Volume measured by primary standard, m^3

9.1.2 Conversion Factors.

Inches Hg. $\times 25.4$ = mm. Hg.

Inches water $\times 73.48 \times 10^{-3}$ = inches Hg.

Cubic feet air $\times 0.0284$ = cubic meters air.

9.1.3 True Airflow Rate.

$$Q = \frac{V_s}{T}$$

Q = Flow rate, $m^3/min.$

T = Time of flow, min.

9.2 Sample Volume.

9.2.1 *Volume Conversion*. Convert the initial and final rotameter readings to true airflow rate, Q , using calibration curve of 8.1.2.

9.2.2 Calculate volume of air sampled

$$V = \frac{Q_1 Q_2}{2} \times T$$

V = Air volume sampled, m^3

Q_1 = Initial airflow rate, $m^3/min.$

Q_2 = Final airflow rate, $m^3/min.$

T = Sampling time, min.

9.3 *Calculate mass concentration of suspended particulates*

$$S.P. = \frac{(W_1 - W_2) \times 10^6}{V}$$

S.P. = Mass concentration of suspended particulates, $\mu g/m^3$

W_1 = Initial weight of filter, g.

W_2 = Final weight of filter, g.

V = Air volume sampled, m^3

10^6 = Conversion of g. to μg .

10. References.

- (1) Robson, C. D., and Foster, K. E., "Evaluation of Air Particulate Sampling Equipment", *Am. Ind. Hyg. Assoc. J.* 24, 404 (1962).
- (2) Tierney, G. P., and Conner, W. D., "Hygroscopic Effects on Weight Determinations of Particulates Collected on Glass-Fiber Filters", *Am. Ind. Hyg. Assoc. J.* 28, 363 (1967).

- (3) Unpublished data based on a collaborative test involving 12 participants, conducted under the direction of the Methods Standardization Services Section of the National Air Pollution Control Administration, October, 1970.
- (4) Harrison, W. K., Nader, J. S., and Pugman, F. S., "Constant Flow Regulators for High-Volume Air Sampler", *Am. Ind. Hyg. Assoc. J.* 21, 114-120 (1960).
- (5) Pate, J. B., and Tabor, E. C., "Analytical Aspects of the Use of Glass-Fiber Filters for the Collection and Analysis of Atmospheric Particulate Matter", *Am. Ind. Hyg. Assoc. J.* 23, 144-150 (1962).

ADDENDUM

A. Alternative Equipment.

A modification of the high-volume sampler incorporating a method for recording the actual airflow over the entire sampling period has been described, and is acceptable for measuring the concentration of suspended particulates (Henderson, J. S., Eighth Conference on Methods in Air Pollution and Industrial Hygiene Studies, 1967, Oakland, Calif.). This modification consists of an exhaust orifice meter assembly connected through a transducer to a system for continuously recording airflow on a circular chart. The volume of air sampled is calculated by the following equation:

$$V = Q \times T.$$

Q = Average sampling rate, m.³/min.
T = Sampling time, minutes.

The average sampling rate, Q, is determined from the recorder chart by estimation if the flow rate does not vary more than 0.11 m.³/min. (4 ft.³/min.) during the sampling period. If the flow rate does vary more than 0.11 m.³ (4 ft.³/min.) during the sampling period, read the flow rate from the chart at 2-hour intervals and take the average.

B. Pressure and Temperature Corrections.

If the pressure or temperature during high-volume sampler calibration is substantially different from the pressure or temperature during orifice calibration, a correction of the flow rate, Q, may be required. If the pressures differ by no more than 15 percent and the temperatures differ by no more than 100 percent (°C), the error in the uncorrected flow rate will be no more than 15 percent. If necessary, obtain the corrected flow rate as directed below. This correction applies only to orifice meters having a constant orifice coefficient. The coefficient for the calibrating orifice described in 5.1.4 has been shown experimentally to be constant over the normal operating range of the high-volume sampler (0.6 to 2.2 m.³/min.; 20 to 78 ft.³/min.). Calculate corrected flow rate:

$$Q_2 = Q_1 \left[\frac{T_2 P_1}{T_1 P_2} \right]^{1/2}$$

Q₂ = Corrected flow rate, m.³/min.

Q₁ = Flow rate during high-volume sampler calibration (Section 8.1.2), m.³/min.

T₁ = Absolute temperature during orifice unit calibration (Section 8.1.1), °K or °R.

P₁ = Barometric pressure during orifice unit calibration (Section 8.1.1), mm. Hg.

T₂ = Absolute temperature during high-volume sampler calibration (Section 8.1.2), °K or °R.

P₂ = Barometric pressure during high-volume sampler calibration (Section 8.1.2), mm. Hg.

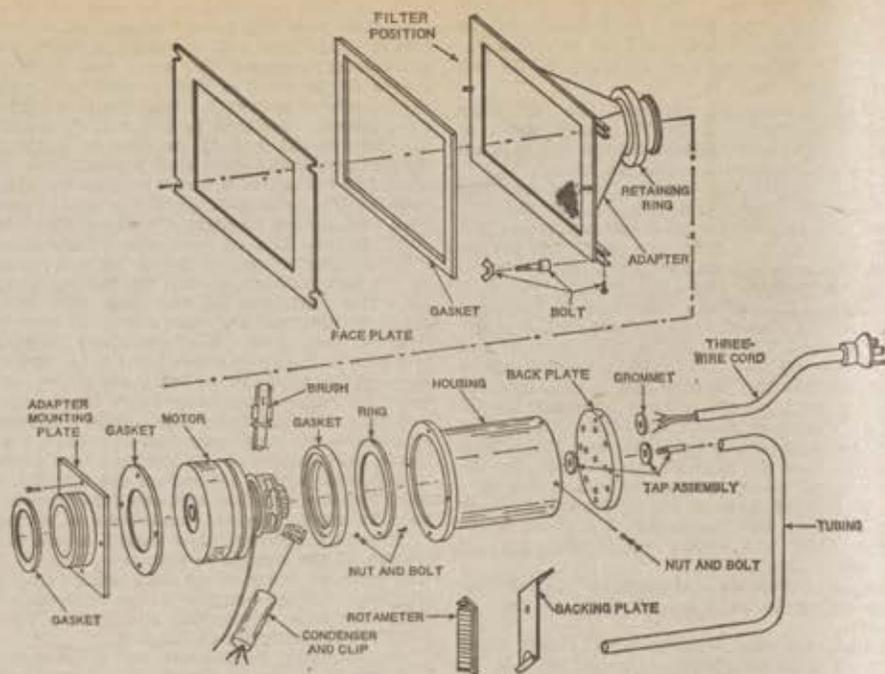


Figure B1. Exploded view of typical high-volume air sampler parts.

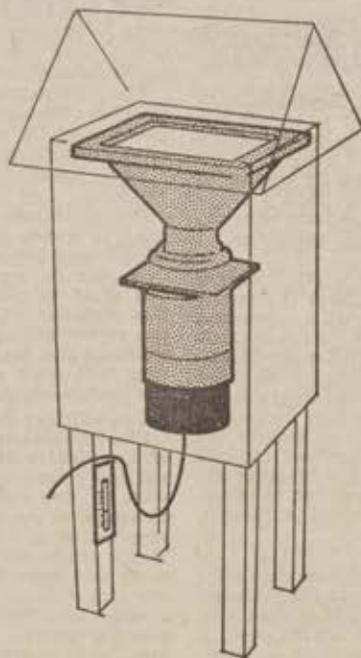


Figure B2. Assembled sampler and shelter.

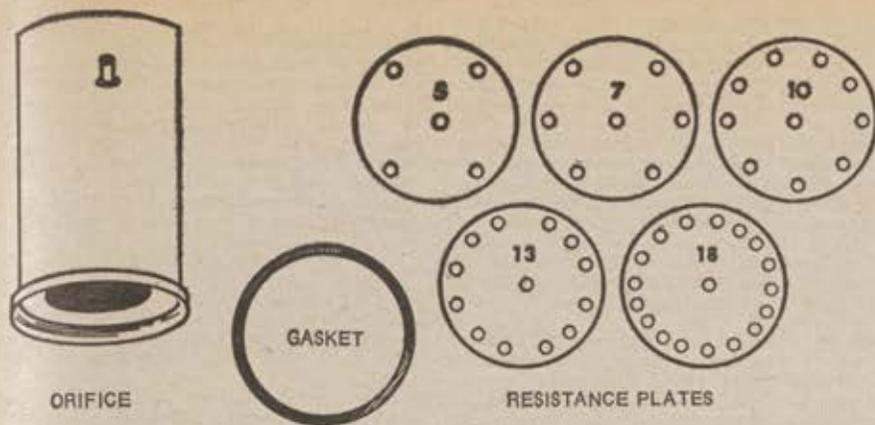


Figure B3. Orifice calibration unit.

APPENDIX C—REFERENCE METHOD FOR THE CONTINUOUS MEASUREMENT OF CARBON MONOXIDE IN THE ATMOSPHERE (NON-DISPERSIVE INFRARED SPECTROMETRY)

1. Principle and Applicability.

1.1 This method is based on the absorption of infrared radiation by carbon monoxide. Energy from a source emitting radiation in the infrared region is directed through reference and sample cells. Both beams pass into matched cells, each containing a selective detector and CO. The CO in the cells absorb infrared radiation only at its characteristic frequencies and the detector is sensitive to those frequencies. With a non-absorbing gas in the reference cell, and with no CO in the sample cell, the signals from both detectors are balanced electronically. Any CO introduced into the sample cell will absorb radiation, which reduces the temperature and pressure in the detector cell and displaces a diaphragm. This displacement is detected electronically and amplified to provide an output signal.

1.2 This method is applicable to the determination of carbon monoxide in ambient air, and to the analysis of gases under pressure.

2. Range and Sensitivity.

2.1 Instruments are available that measure in the range of 0 to 58 mg./m.³ (0-50 p.p.m.), which is the range most commonly used for urban atmospheric sampling. Most instruments measure in additional ranges.

2.2 Sensitivity is 1 percent of full-scale response per 0.6 mg. CO/m.³ (0.5 p.p.m.).

3. Interferences.

3.1 Interferences vary between individual instruments. The effect of carbon dioxide interference at normal concentrations is minimal. The primary interference is water vapor, and with no correction may give an interference equivalent to as high as 12 mg. CO/m.³ Water vapor interference can be minimized by (a) passing the air sample through silica gel or similar drying agents, (b) maintaining constant humidity in the sample and calibration gases by refrigeration, (c) saturating the air sample and calibration gases to maintain constant humidity or (d) using narrowband optical filters in combination with some of these measures.

3.2 Hydrocarbons at ambient levels do not ordinarily interfere.

4. Precision, Accuracy, and Stability.

4.1 Precision determined with calibration gases is ±0.5 percent full scale in the 0-58 mg./m.³ range.

4.2 Accuracy depends on instrument linearity and the absolute concentrations of the calibration gases. An accuracy of ±1 percent of full scale in the 0-58 mg./m.³ range can be obtained.

4.3 Variations in ambient room temperature can cause changes equivalent to as much as 0.5 mg. CO/m.³ per °C. This effect can be minimized by operating the analyzer in a temperature-controlled room. Pressure changes between span checks will cause changes in instrument response. Zero drift is usually less than ±1 percent of full scale per 24 hours, if cell temperature and pressure are maintained constant.

5. Apparatus.

5.1 Carbon Monoxide Analyzer. Commercially available instruments should be installed on location and demonstrated, preferably by the manufacturer, to meet or exceed manufacturers specifications and those described in this method.

5.2 Sample Introduction System. Pump, flow control valve, and flowmeter.

5.3 Filter (In-line). A filter with a porosity of 2 to 10 microns should be used to keep large particles from the sample cell.

5.4 Moisture Control. Refrigeration units are available with some commercial instruments for maintaining constant humidity. Drying tubes (with sufficient capacity to operate for 72 hours) containing indicating silica gel can be used. Other techniques that prevent the interference of moisture are satisfactory.

6. Reagents.

6.1 Zero Gas. Nitrogen or helium containing less than 0.1 mg. CO/m.³

6.2 Calibration Gases. Calibration gases corresponding to 10, 20, 40, and 80 percent of full scale are used. Gases must be provided with certification or guaranteed analysis of carbon monoxide content.

6.3 Span Gas. The calibration gas corresponding to 80 percent of full scale is used to span the instrument.

7. Procedure.

7.1 Calibrate the instrument as described in 8.1. All gases (sample, zero, calibration, and span) must be introduced into the entire analyzer system. Figure C1 shows a typical flow diagram. For specific operating instructions, refer to the manufacturer's manual.

8. Calibration.

8.1 Calibration Curve. Determine the linearity of the detector response at the operating flow rate and temperature. Prepare a calibration curve and check the curve

furnished with the instrument. Introduce zero gas and set the zero control to indicate a recorder reading of zero. Introduce span gas and adjust the span control to indicate the proper value on the recorder scale (e.g. on 0-58 mg./m.³ scale, set the 46 mg./m.³ standard at 80 percent of the recorder chart). Recheck zero and span until adjustments are no longer necessary. Introduce intermediate calibration gases and plot the values obtained. If a smooth curve is not obtained, calibration gases may need replacement.

9. Calculations.

9.1 Determine the concentrations directly from the calibration curve. No calculations are necessary.

9.2 Carbon monoxide concentrations in mg./m.³ are converted to p.p.m. as follows:

$$\text{p.p.m. CO} = \text{mg. CO/m.}^3 \times 0.873$$

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Continuous CO Monitoring System, Model A 5611, Intertech Corp., Princeton, N.J.

Bendix-UNOR Infrared Gas Analyzers. Ronceverte, W. Va.

ADDENDA

A. Suggested Performance Specifications for NDIR Carbon Monoxide Analyzers:

Range (minimum)-----	0-58 mg./m. ³ (0-50 p.p.m.).
Output (minimum)-----	0-10, 100, 1,000, 5,000 mv. full scale.
Minimum detectable sensitivity.	0.6 mg./m. ³ (0.5 p.p.m.).
Lag time (maximum)---	15 seconds.
Time to 90 percent response (maximum).	30 seconds.
Rise time, 90 percent (maximum).	15 seconds.
Fall time, 90 percent (maximum).	15 seconds.
Zero drift (maximum)---	3 percent/week, not to exceed 1 percent/24 hours.
Span drift (maximum) --	3 percent/week, not to exceed 1 percent/24 hours.
Precision (minimum)---	±0.5 percent.
Operational period (minimum).	3 days.
Noise (maximum)-----	±0.5 percent.
Interference equivalent (maximum).	1 percent of full scale.
Operating temperature range (minimum).	5-40° C.
Operating humidity range (minimum).	10-100 percent.
Linearity (maximum deviation).	1 percent of full scale.

B. Suggested Definitions of Performance Specifications:

Range—The minimum and maximum measurement limits.

Output—Electrical signal which is proportional to the measurement; intended for connection to readout or data processing devices. Usually expressed as millivolts or milliamps full scale at a given impedance.

Full Scale—The maximum measuring limit for a given range.

Minimum Detectable Sensitivity—The smallest amount of input concentration that can be detected as the concentration approaches zero.

Accuracy—The degree of agreement between a measured value and the true value; usually expressed as \pm percent of full scale.

Lag Time—The time interval from a step change in input concentration at the instrument inlet to the first corresponding change in the instrument output.

Time to 90 percent Response—The time interval from a step change in the input concentration at the instrument inlet to a reading of 90 percent of the ultimate recorded concentration.

Rise Time (90 percent)—The interval between initial response time and time to 90 percent response after a step increase in the inlet concentration.

Fall Time (90 percent)—The interval between initial response time and time to 90 percent response after a step decrease in the inlet concentration.

Zero Drift—The change in instrument output over a stated time period, usually 24 hours, of unadjusted continuous operation, when the input concentration is zero; usually expressed as percent full scale.

Span Drift—The change in instrument output over a stated time period, usually 24 hours, of unadjusted continuous operation, when the input concentration is a stated upscale value; usually expressed as percent full scale.

Precision—The degree of agreement between repeated measurements of the same concentration, expressed as the average deviation of the single results from the mean.

Operational Period—The period of time over which the instrument can be expected to operate unattended within specifications.

Noise—Spontaneous deviations from a mean output not caused by input concentration changes.

Interference—An undesired positive or negative output caused by a substance other than the one being measured.

Interference Equivalent—The portion of indicated input concentration due to the presence of an interferent.

Operating Temperature Range—The range of ambient temperatures over which the instrument will meet all performance specifications.

Operating Humidity Range—The range of ambient relative humidity over which the instrument will meet all performance specifications.

Linearity—The maximum deviation between an actual instrument reading and the reading predicted by a straight line drawn between upper and lower calibration points.

at a point near the photomultiplier tube are also allowable.

5.2 Air Flowmeter. A device capable of controlling air flows between 0-1.5 l/min.

5.3 Ethylene Flowmeter. A device capable of controlling ethylene flows between 0-50 ml./min. At any flow in this range, the device should be capable of maintaining constant flow rate within ± 3 ml./min.

5.4 Air Inlet Filter. A Teflon filter capable of removing all particles greater than 5 microns in diameter.

5.5 Photomultiplier Tube. A high gain low dark current (not more than 1×10^{-9} ampere) photomultiplier tube having its maximum gain at about 430 nm. The following tubes are satisfactory: RCA 4507, RCA 8575, EMI 9750, EMI 9524, and EMI 9536.

5.6 High Voltage Power Supply. Capable of delivering up to 2,000 volts of regulated power.

5.7 Direct Current Amplifier. Capable of full scale amplification of currents from 10^{-9} to 10^{-7} ampere; an electrometer is commonly used.

5.8 Recorder. Capable of full scale display of voltages from the DC amplifier. These voltages commonly are in the 1 millivolt to 1-volt range.

5.9 Ozone Source and Dilution System. The ozone source consists of a quartz tube into which ozone-free air is introduced and then irradiated with a very stable low pressure mercury lamp. The level of irradiation is controlled by an adjustable aluminum sleeve which fits around the lamp. Ozone concentrations are varied by adjustment of this sleeve. At a fixed level of irradiation, ozone is produced at a constant rate. By carefully controlling the flow of air through the quartz tube, atmospheres are generated which contain constant concentrations of ozone. The levels of ozone in the test atmospheres are determined by the neutral buffered potassium iodide method (see section 8). This ozone source and dilution system is shown schematically in Figures D2 and D3, and has been described by Hodgeson, Stevens, and Martin.

5.10 Apparatus for Calibration

5.10.1 Absorber. All-glass impingers as shown in Figure D4 are recommended. The impingers may be purchased from most major glassware suppliers. Two absorbers in series are needed to insure complete collection of the sample.

5.10.2 Air Pump. Capable of drawing 1 liter/minute through the absorbers. The pump should be equipped with a needle valve on the inlet side to regulate flow.

5.10.3 Thermometer. With an accuracy of $\pm 2^\circ$ C.

5.10.4 Barometer. Accurate to the nearest mm. Hg.

5.10.5 Flowmeter. Calibrated metering device for measuring flow up to 1 liter/minute within ± 3 percent. (For measuring flow through impingers.)

5.10.6 Flowmeter. For measuring airflow past the lamp; must be capable of measuring flows from 2 to 15 liters/minute within ± 5 percent.

5.10.7 Trap. Containing glass wool to protect needle valve.

5.10.8 Volumetric Flasks. 25, 100, 500, 1,000 ml.

5.10.9 Buret. 50 ml.

5.10.10 Pipets. 0.5, 1, 2, 3, 4, 10, 25, and 50 ml. volumetric.

5.10.11 Erlenmeyer Flasks. 300 ml.

5.10.12 Spectrophotometer. Capable of measuring absorbance at 352 nm. Matched 1-cm. cells should be used.

6. Reagents.

6.1 Ethylene. C. P. grade (minimum).

6.2 Cylinder Air. Dry grade.

SAMPLE INTRODUCTION

ANALYZER SYSTEM

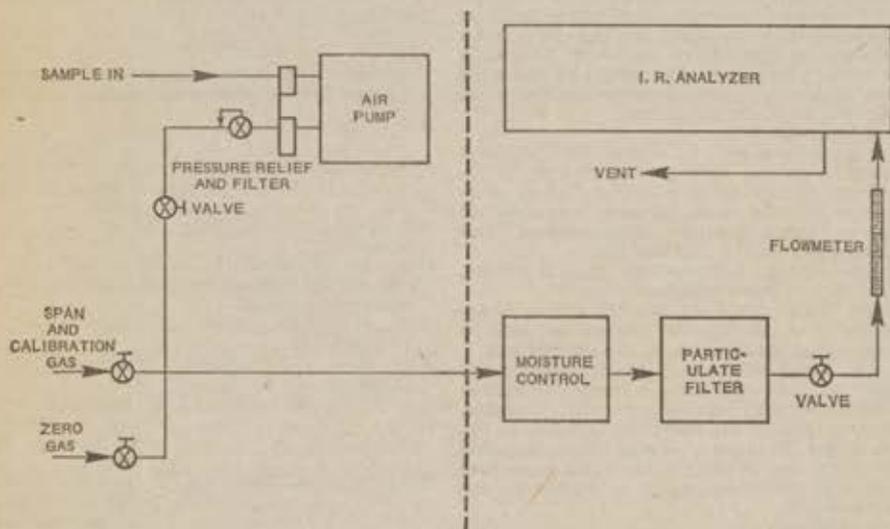


Figure C1. Carbon monoxide analyzer flow diagram.

APPENDIX D—REFERENCE METHOD FOR THE MEASUREMENT OF PHOTOCHEMICAL OXIDANTS CORRECTED FOR INTERFERENCES DUE TO NITROGEN OXIDES AND SULFUR DIOXIDE

1. Principle and Applicability.

1.1 Ambient air and ethylene are delivered simultaneously to a mixing zone where the ozone in the air reacts with the ethylene to emit light which is detected by a photomultiplier tube. The resulting photocurrent is amplified and is either read directly or displayed on a recorder.

1.2 The method is applicable to the continuous measurement of ozone in ambient air.

2. Range and Sensitivity.

2.1 The range is $9.8 \mu\text{g. O}_3/\text{m}^3$ to greater than $1960 \mu\text{g. O}_3/\text{m}^3$ (0.005 p.p.m. O_3 to greater than 1 p.p.m. O_3).

2.2 The sensitivity is $9.8 \mu\text{g. O}_3/\text{m}^3$ (0.005 p.p.m. O_3).

3. Interferences.

3.1 Other oxidizing and reducing species normally found in ambient air do not interfere.

4. Precision and Accuracy.

4.1 The average deviation from the mean of repeated single measurements does not exceed 5 percent of the mean of the measurements.

4.2 The method is accurate within ± 7 percent.

5. Apparatus.

5.1 **Detector Cell.** Figure D1 is a drawing of a typical detector cell showing flow paths of gases, the mixing zone, and placement of the photomultiplier tube. Other flow paths in which the air and ethylene streams meet

6.3 *Activated Charcoal Trap.* For filtering cylinder air.

6.4 *Purified Water.* Used for all reagents. To distilled or deionized water in an all-glass distillation apparatus, add a crystal of potassium permanganate and a crystal of barium hydroxide, and redistill.

6.5 *Absorbing Reagent.* Dissolve 13.6 g. potassium dihydrogen phosphate (KH_2PO_4), 14.2 g. anhydrous disodium hydrogen phosphate (Na_2HPO_4) or 35.8 g. dodecahydrate salt ($Na_2HPO_4 \cdot 12H_2O$), and 10.0 g. potassium iodide (KI) in purified water and dilute to 1,000 ml. The pH should be 6.8 ± 0.2 . The solution is stable for several weeks, if stored in a glass-stoppered amber bottle in a cool, dark place.

6.6 *Standard Arsenious Oxide Solution (0.05 N).* Use primary standard grade arsenious oxide (As_2O_3). Dry 1 hour at $105^\circ C$. immediately before using. Accurately weigh, to the nearest 0.1 mg., 2.4 g. arsenious oxide from a small glass-stoppered weighing bottle. Dissolve in 25 ml. 1 N sodium hydroxide in a flask or beaker on a steam bath. Add 25 ml. 1 N sulfuric acid. Cool, transfer quantitatively to a 1,000-ml. volumetric flask, and dilute to volume. Note: Solution must be neutral to litmus, not alkaline.

$$\text{Normality } As_2O_3 = \frac{\text{wt } As_2O_3 \text{ (g.)}}{49.46}$$

6.7 *Starch Indicator Solution (0.2 percent).* Triturate 0.4 g. soluble starch and approximately 2 mg. mercuric iodide (preservative) with a little water. Add the paste slowly to 200 ml. of boiling water. Continue boiling until the solution is clear, allow to cool, and transfer to a glass-stoppered bottle.

6.8 *Standard Iodine Solution (0.05 N).*

6.8.1 *Preparation.* Dissolve 5.0 g. potassium iodide (KI) and 3.2 g. resublimed iodine (I_2) in 10 ml. purified water. When the iodine dissolves, transfer the solution to a 500-ml. glass-stoppered volumetric flask. Dilute to mark with purified water and mix thoroughly. Keep solution in a dark brown glass-stoppered bottle away from light, and re-standardize as necessary.

6.8.2 *Standardization.* Pipet accurately 20 ml. standard arsenious oxide solution into a 300-ml. Erlenmeyer flask. Acidify slightly with 1:10 sulfuric acid, neutralize with solid sodium bicarbonate, and add about 2 g. excess. Titrate with the standard iodine solution using 5 ml. starch solution as indicator. Saturate the solution with carbon dioxide near the end point by adding 1 ml. of 1:10 sulfuric acid. Continue the titration to the first appearance of a blue color which persists for 30 seconds.

$$\text{Normality } I_2 = \frac{\text{ml. } As_2O_3 \times \text{Normality } As_2O_3}{\text{ml. } I_2}$$

6.9 *Diluted Standard Iodine.* Immediately before use, pipet 1 ml. standard iodine solution into a 100-ml. volumetric flask and dilute to volume with absorbing reagent.

7. Procedure.

7.1 Instruments can be constructed from the components given here or may be purchased. If commercial instruments are used, follow the specific instructions given in the manufacturer's manual. Calibrate the instrument as directed in section 8. Introduce samples into the system under the same conditions of pressure and flow rate as are used in calibration. By proper adjustments of zero and span controls, direct reading of ozone concentration is possible.

8. Calibration.

8.1 *KI Calibration Curve.* Prepare a curve of absorbance of various iodine solutions against calculated ozone equivalents as follows:

8.1.1 Into a series of 25 ml. volumetric flasks, pipet 0.5, 1, 2, 3, and 4 ml. of diluted standard iodine solution (6.9). Dilute each to the mark with absorbing reagent. Mix thoroughly, and immediately read the absorbance of each at 352 nm. against unexposed absorbing reagent as the reference.

8.1.2 Calculate the concentration of the solutions as total $\mu g. O_3$ as follows:

$$\begin{aligned} \text{Total } \mu g. O_3 &= (N) (96) (V_1) \\ N &= \text{Normality } I_2 \text{ (see 6.8.2), meq./ml.} \\ V_1 &= \text{Volume of diluted standard } I_2 \text{ added,} \\ &\text{ml. (0.5, 1, 2, 3, 4).} \end{aligned}$$

Plot absorbance versus total $\mu g. O_3$.

8.2 Instrument Calibration.

8.2.1 *Generation of Test Atmospheres.* Assemble the apparatus as shown in Figure D3. The ozone concentration produced by the generator can be varied by changing the position of the adjustable sleeve. For calibration of ambient air analyzers, the ozone source should be capable of producing ozone concentrations in the range 100 to 1,000 $\mu g./m.^3$ (0.05 to 0.5 p.p.m.) at a flow rate of at least 5 liters per minute. At all times the airflow through the generator must be greater than the total flow required by the sampling systems.

8.2.2 *Sampling and Analyses of Test Atmospheres.* Assemble the KI sampling train as shown in Figure D4. Use ground-glass connections upstream from the impinger. Butt-to-butt connections with Tygon tubing may be used. The manifold distributing the test atmospheres must be sampled simultaneously by the KI sampling train and the instrument to be calibrated. Check assembled systems for leaks. Record the instrument response in nanoamperes at each concentration (usually six). Establish these concentrations by analysis, using the neutral buffered potassium iodide method as follows:

8.2.2.1 *Blank.* With ozone lamp off, flush the system for several minutes to remove residual ozone. Pipet 10 ml. absorbing reagent into each absorber. Draw air from the ozone-generating system through the sampling train at 0.2 to 1 liter/minute for 10 minutes. Immediately transfer the exposed solution to a clean 1-cm. cell. Determine the absorbance at 352 nm. against unexposed absorbing reagent as the reference. If the system blank gives an absorbance, continue flushing the ozone generation system until no absorbance is obtained.

8.2.2.2 *Test Atmospheres.* With the ozone lamp operating, equilibrate the system for about 10 minutes. Pipet 10 ml. of absorbing reagent into each absorber and collect samples for 10 minutes in the concentration range desired for calibration. Immediately transfer the solutions from the two absorbers to clean 1-cm. cells. Determine the absorbance of each at 352 nm. against unexposed absorbing reagent as the reference. Add the absorbances of the two solutions to obtain total absorbance. Read total $\mu g. O_3$ from the calibration curve (see 8.1). Calculate total volume of air sampled corrected to reference conditions of $25^\circ C$. and 760 mm. Hg. as follows:

$$V_R = V \times \frac{P}{760} \times \frac{298}{t + 273} \times 10^{-3}$$

V_R = Volume of air at reference conditions, $m.^3$
 V = Volume of air at sampling conditions, liters.
 P = Barometric pressure at sampling conditions, mm. Hg.
 t = Temperature at sampling conditions, $^\circ C$.
 10^{-3} = Conversion of liters to $m.^3$

Calculate ozone concentration in p.p.m. as follows:

$$\text{p.p.m. } O_3 = \frac{\mu g. O_3}{V_R} \times 5.10 \times 10^{-4}$$

8.2.3 *Instrument Calibration Curve.* Instrument response from the photomultiplier tube is ordinarily in current or voltage. Plot the current, or voltage if appropriate, (y-axis) for the test atmospheres against ozone concentration as determined by the neutral buffered potassium iodide method, in p.p.m. (x-axis).

9. Calculations.

9.1 If a recorder is used which has been properly zeroed and spanned, ozone concentrations can be read directly.

9.2 If the DC amplifier is read directly, the reading must be converted to ozone concentrations using the instrument calibration curve (8.2.3).

9.3 Conversion between p.p.m. and $\mu g./m.^3$ values for ozone can be made as follows:

$$\text{p.p.m. } O_3 = \frac{\mu g. O_3}{m.^3} \times 5.10 \times 10^{-4}$$

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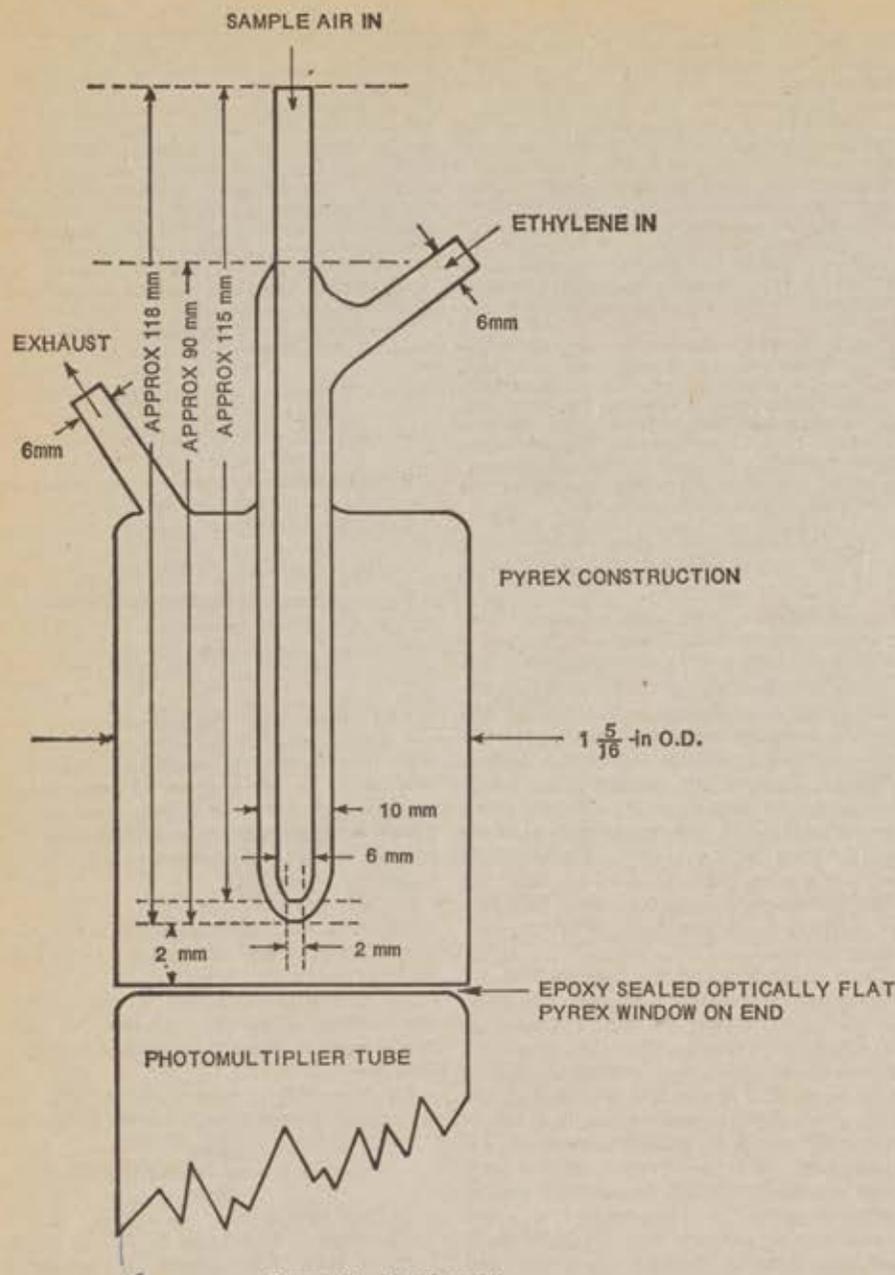


Figure D1. Detector cell.

APPENDIX E—REFERENCE METHOD FOR DETERMINATION OF HYDROCARBONS CORRECTED FOR METHANE

1. Principle and Applicability.

1.1 Measured volumes of air are delivered semicontinuously (4 to 12 times per hour) to a hydrogen flame ionization detector to measure its total hydrocarbon (THC) content. An aliquot of the same air sample is introduced into a stripper column which removes water, carbon dioxide, and hydrocarbons other than methane. Methane and carbon monoxide are passed quantitatively to a gas chromatographic column where they are separated. The methane is eluted first, and is passed unchanged through a catalytic reduction tube into the flame ionization detector. The carbon monoxide is eluted into the catalytic reduction tube where it is reduced to methane before passing through

the flame ionization detector. Between analyses the stripper column is backflushed to prepare it for subsequent analysis. Hydrocarbon concentrations corrected for methane are determined by subtracting the methane value from the total hydrocarbon value.

Two modes of operation are possible: (1) A complete chromatographic analysis showing the continuous output from the detector for each sample injection; (2) The system is programmed for automatic zero and span to display selected band widths of the chromatogram. The peak height is then used as the measure of the concentration. The former operation is referred to as the chromatographic or spectro mode and the latter as the barographic or "normal" mode depending on the make of analyzer.

1.2 The method is applicable to the semicontinuous measurement of hydrocarbons corrected for methane in ambient air. The

carbon monoxide measurement, which is simultaneously obtained in this method, is not required in making measurements of hydrocarbons corrected for methane and will not be dealt with here.

2. Range and Sensitivity.

2.1 Instruments are available with various range combinations. For atmospheric analysis the THC range is 0-13.1 mg./m.³ (0-20 p.p.m.) carbon (as CH₄) and the methane range is 0-6.55 mg./m.³ (0-10 p.p.m.). For special applications, lower ranges are available and in these applications the range for THC is 0-1.31 mg./m.³ (0-2 p.p.m.) carbon (as CH₄) and for methane the range is 0-1.31 mg./m.³ (0-2 p.p.m.).

2.2 For the higher, atmospheric analysis ranges the sensitivity for THC is 0.065 mg./m.³ (0.1 p.p.m.) carbon (as CH₄) and for methane the sensitivity is 0.033 mg./m.³ (0.05 p.p.m.). For the lower, special analysis ranges the sensitivity is 0.016 mg./m.³ (0.025 p.p.m.) for each gas.

3. Interferences.

3.1 No interference in the methane measurement has been observed. The THC measurement typically includes all or a portion of what is generally classified as the air peak interference. This effect is minimized by proper plumbing arrangements or is negated electronically.

4. Precision, Accuracy, and Stability.

4.1 Precision determined with calibration gases is ±0.5 percent of full scale in the higher, atmospheric analysis ranges.

4.2 Accuracy is dependent on instrument linearity and absolute concentration of the calibration gases. An accuracy of 1 percent of full scale in the higher, atmospheric analysis ranges and 2 percent of full scale in the lower, special analysis ranges can be obtained.

4.3 Variations in ambient room temperature can cause changes in performance characteristics. This is due to shifts in oven temperature, flow rates, and pressure with ambient temperature changes. The instrument should meet performance specifications with room temperature changes of ±3° C. Baseline drift is automatically corrected in the barographic mode.

5. Apparatus.

5.1 *Commercially Available THC, CH₄, and CO Analyzer.* Instruments should be installed on location and demonstrated, preferably by the manufacturer, or his representative, to meet or exceed manufacturer's specifications and those described in this method.

5.2 *Sample Introduction System.* Pump, flow control valves, automatic switching valves, and flowmeter.

5.3 *Filter (In-line).* A binder-free, glass-fiber filter with a porosity of 3 to 5 microns should be immediately downstream from the sample pump.

5.4 *Stripper or Precolumn.* Located outside of the oven at ambient temperature. The column should be repacked or replaced after the equivalent of 2 months of continuous operation.

5.5 *Oven.* For containing the analytical column and catalytic converter. The oven should be capable of maintaining an elevated temperature constant within ±0.5° C. The specific temperature varies with instrument manufacturer.

6. Reagents.

6.1 *Combustion Gas.* Air containing less than 1.3 mg./m.³ (2 p.p.m.) hydrocarbon as methane.

6.2 *Fuel.* Hydrogen or a mixture of hydrogen and inert gas containing less than 0.065 mg./m.³ (0.1 p.p.m.) hydrocarbons as methane.

6.3 *Carrier Gas.* Helium, nitrogen, air or hydrogen containing less than 0.065 mg./m.³ (0.1 p.p.m.) hydrocarbons as methane.

6.4 Zero Gas. Air containing less than 0.065 mg./m.³ (0.1 p.p.m.) total hydrocarbons as methane.

6.5 Calibration Gases. Gases needed for linearity checks (peak heights) are determined by the ranges used. Calibration gases corresponding to 10, 20, 40, and 80 percent of full scale are needed. Gases must be provided with certification or guaranteed analysis. Methane is used for both the total hydrocarbon measurement and methane measurement.

6.6 Span Gas. The calibration gas corresponding to 80 percent of full scale is used to span the instrument.

7. Procedure.

7.1 Calibrate the instrument as described in 8.1. Introduce sample into the system under the same conditions of pressure and flow rates as are used in calibration. (The pump is bypassed only when pressurized cylinder gases are used.) Figure E1 shows a typical flow diagram; for specific operating instructions refer to manufacturer's manual.

8. Calibration.

8.1 Calibration Curve. Determine the linearity of the system for THC and methane in the barographic mode by introducing zero gas and adjusting the respective zeroing controls to indicate a recorder reading of zero. Introduce the span gas and adjust the span control to indicate the proper value on the recorder scale. Recheck zero and span until adjustments are no longer necessary. Introduce intermediate calibration gases and plot the values obtained. If a smooth curve is not obtained, calibration gases may need replacement.

9. Calculation.

9.1 Determine concentrations of total hydrocarbons (as CH₄) and CH₄, directly from the calibration curves. No calculations are necessary.

9.2 Determine concentration of hydrocarbons corrected for methane by subtracting the methane concentration from the total hydrocarbon concentration.

9.3 Conversion between p.p.m. and mg./m.³ values for total hydrocarbons (as CH₄) methane and hydrocarbons corrected for methane are made as follows:

$$\text{p.p.m. carbon (as CH}_4\text{)} = [\text{mg. carbon (as CH}_4\text{) / m.}^3] \times 1.53$$

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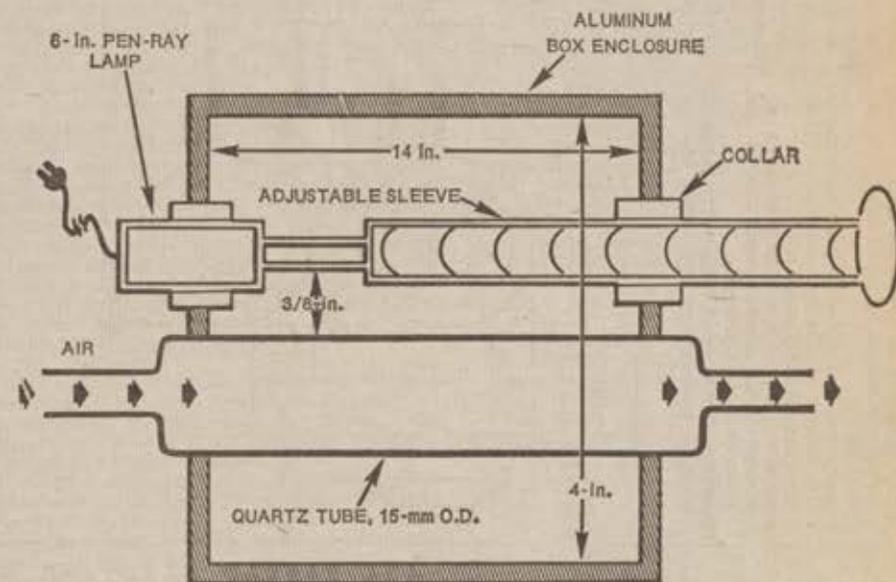


Figure D2. Ozon source.

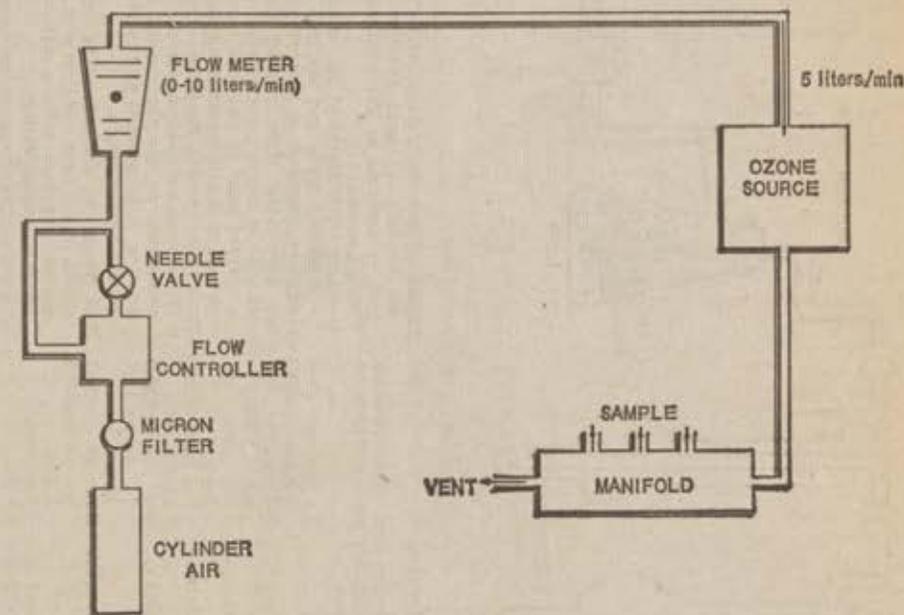


Figure D3. Ozon calibration air supply, source, and manifold system.

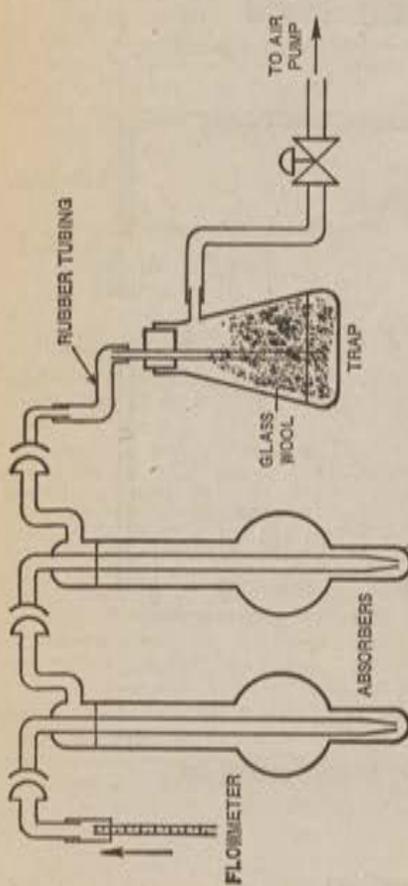


Figure D-4. KI sampling train.

AGENDA

A. Suggested Performance Specifications for Atmospheric Analyzers for Hydrocarbons Corrected for Methane:

Range (minimum) -----	0.3 mg./m. ³ (0-5 p.p.m.) THC
Output (minimum) -----	0-3 mg./m. ³ (0-5 p.p.m.) CH ₄ full scale.
Minimum detectable sensitivity.	0.1 p.p.m. THC.
Zero drift (maximum) ---	0.1 p.p.m. CH ₄ . Not to exceed 1 percent/24 hours.
Span drift (maximum) --	Not to exceed 1 percent/24 hours.
Precision (minimum) ---	±0.5 percent.
Operational period (minimum).	3 days.
Operating temperature range (minimum).	5-40° C.
Operating humidity range (minimum).	10-100 percent.
Linearity (maximum) ---	1 percent of full scale.

B. Suggested Definitions of Performance Specifications:

Range—The minimum and maximum measurement limits.
 Output—Electrical signal which is proportional to the measurement; intended for connection to readout or data processing devices. Usually expressed as millivolts or milliamperes full scale at a given impedance.
 Full Scale—The maximum measuring limit for a given range.

Minimum Detectable Sensitivity—The smallest amount of input concentration that can be detected as the concentration approaches zero.
 Accuracy—The degree of agreement between a measured value and the true value; usually expressed as ± percent of full scale.
 Lag Time—The time interval from a step change in input concentration at the instrument inlet to the first corresponding change in the instrument output.
 Time to 90 Percent Response—The time interval from a step change in the input concentration at the instrument inlet to a reading of 90 percent of the ultimate recorded concentration.
 Rise Time (90 Percent)—The interval between initial response time and time to 90 percent response after a step decrease in the inlet concentration.
 Zero Drift—The change in instrument output over a stated time period, usually 24 hours, of unadjusted continuous operation, when the input concentration is zero; usually expressed as percent full scale.
 Span Drift—The change in instrument output over a stated time period, usually 24 hours, of unadjusted continuous operation, when the input concentration is a stated upscale value; usually expressed as percent full scale.
 Precision—The degree of agreement between repeated measurements of the same concentration. It is expressed as the average deviation of the single results from the mean.
 Operational Period—The period of time over which the instrument can be expected to operate unattended within specifications.

Noise—Spontaneous deviations from a mean output not caused by input concentration changes.

Interference—An undesired positive or negative output caused by a substance other than the one being measured.

Interference Equivalent—The portion of indicated input concentration due to the presence of an interferent.

Operating Temperature Range—The range of ambient temperatures over which the in-

strument will meet all performance specifications.

Operating Humidity Range—The range of ambient relative humidity over which the instrument will meet all performance specifications.

Linearity—The maximum deviation between an actual instrument reading and the reading predicted by a straight line drawn between upper and lower calibration points.

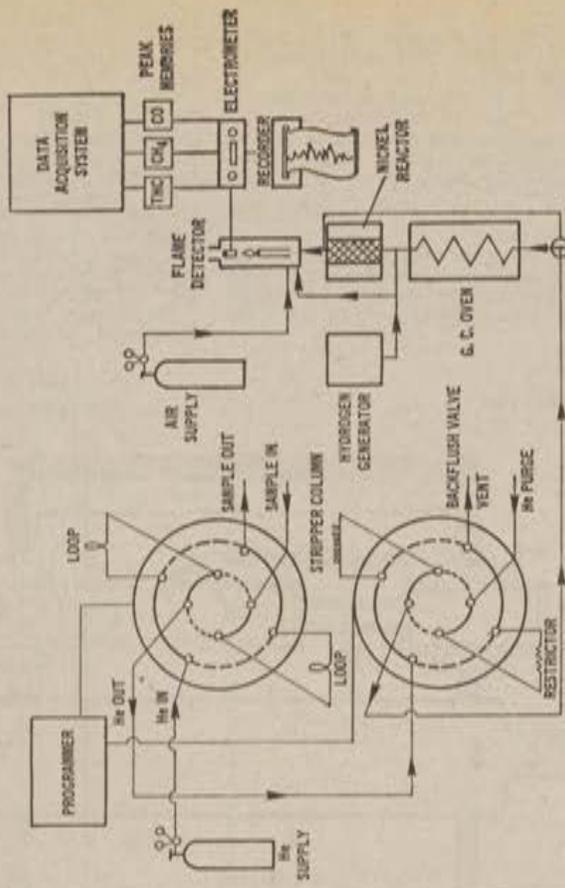


Figure E1. Typical flow diagram.

APPENDIX F—REFERENCE METHOD FOR THE DETERMINATION OF NITROGEN DIOXIDE IN THE ATMOSPHERE (24-HOUR SAMPLING METHOD)

1. Principle and Applicability.

1.1 Nitrogen dioxide is collected by bubbling air through a sodium hydroxide solution to form a stable solution of sodium nitrite. The nitrite ion produced during sampling is determined colorimetrically by reacting the exposed absorbing reagent with phosphoric acid, sulfanilamide, and N-1-naphthylethylenediamine dihydrochloride.
 1.2 The method is applicable to collection of 24-hour samples in the field and subsequent analysis in the laboratory.

2. Range and Sensitivity.

2.1 The range of the analysis is 0.04 to 1.5 µg. NO₂/ml. With 50 ml. absorbing reagent and a sampling rate of 200 ml./min. for 24 hours, the range of the method is 20-740 µg./m.³ (0.01-0.4 p.p.m.) nitrogen dioxide.

2.2 A concentration of 0.04 µg. NO₂/ml. will produce an absorbance of 0.02 using 1-cm. cells.

3. Interferences.

3.1 The interference of sulfur dioxide is eliminated by converting it to sulfuric acid with hydrogen peroxide before analysis. (f)

4. Precision, Accuracy, and Stability.

4.1 The relative standard deviations are 14.4 percent and 21.5 percent at nitrogen dioxide concentrations of 140 µg./m.³ (0.072 p.p.m.) and 200 µg./m.³ (0.108 p.p.m.), respectively, based on an automated analysis of

samples collected from a standard test atmosphere. Precision would probably be different when the analysis is performed manually.

4.2 No accuracy data are available.

4.3 Samples are stable for at least 6 weeks.

5. Apparatus.

5.1 Sampling. See Figure F1.

5.1.1 Absorber. Polypropylene tubes 164 x 32 mm., equipped with polypropylene two-port closures.* Rubber stoppers cause high and varying blank values and should not be used. A gas dispersion tube with a fritted end of porosity B (70-100 μm. maximum pore diameter) is used.

5.1.1.1 Measurement of Maximum Pore Diameter of Frit. Carefully clean the frit with dichromate-concentrated sulfuric acid cleaning solution and rinse well with distilled water. Insert through one hole of a two-hole rubber stopper and install in a test tube containing sufficient distilled water to cover the fritted portion. Attach a vacuum source to the other hole of the rubber stopper and measure the vacuum required to draw the first perceptible stream of air bubbles through the frit. Apply the following equation:

$$\text{maximum pore diameter, } \mu\text{m.} = \frac{30s}{P}$$

s = Surface tension of water in dynes/cm. at the test temperature (73 at 18° C., 72 at 25° C., and 71 at 31° C.).

P = Measured vacuum, mm. Hg.

5.1.2 Probe. Teflon, polypropylene, or glass tube with a polypropylene or glass funnel at the end and a membrane filter to protect the frit. Replace filter after collecting five samples, or more often as indicated by visual observation of the loading.

5.1.3 Flow Control Device. Calibrated 27-gauge hypodermic needle, three-eighths of an inch long to maintain a flow of approximately 0.2 liter/minute. The needle should be protected by a membrane filter. Change filter after collecting 10 samples.

5.1.4 Air Pump. Capable of maintaining a flow of 0.2 liter/minute through the absorber, and a vacuum of 0.7 atmosphere.

5.1.5 Calibration Equipment. Glass flowmeter for measuring airflows up to approximately 275 ml./min. within ± 2 percent, stopwatch, and precision wet test meter (1 liter/revolution).

5.2 Analysis.

5.2.1 Volumetric Flasks. 50, 100, 200, 250, 500, 1,000 ml.

5.2.2 Graduated Cylinder. 1,000 ml.

5.2.3 Pipets. 1, 2, 5, 10, 15 ml. volumetric; 2 ml., graduated in 1/10 ml. intervals.

5.2.4 Test Tube.

5.2.5 Spectrophotometer or Colorimeter. Capable of measuring absorbance at 540 nm. Bandwidth is not critical.

6. Reagents.

6.1 Sampling.

6.1.1 Absorbing Reagent. Dissolve 4.0 g. sodium hydroxide in distilled water and dilute to 1,000 ml.

6.2 Analysis.

6.2.1 Sulfanilamide. Dissolve 20 g. sulfanilamide in 700 ml. distilled water. Add, with mixing, 50 ml. concentrated phosphoric acid (85 percent) and dilute to 1,000 ml. This solution is stable for a month if refrigerated.

6.2.2 NEDA Solution. Dissolve 0.5 g. N-1-naphthylethylenediamine dihydrochloride in 500 ml. of distilled water. This solution is stable for a month if refrigerated and protected from light.

6.2.3 Hydrogen Peroxide. Dilute 0.2 ml. 30 percent hydrogen peroxide to 250 ml. with distilled water. This solution may be used for a month if protected from light.

6.2.4 Standard Nitrite Solution. Dissolve sufficient desiccated sodium nitrite (NaNO₂, assay of 97 percent or greater) and dilute

with distilled water to 1,000 ml. so that a solution containing 1,000 μg. NO₂/ml. is obtained. The amount of NaNO₂ to use is calculated as follows:

$$G = \frac{1,500}{A} \times 100$$

G = Amount of NaNO₂, g.
1,500 = Gravimetric factor in converting NO₂ into NaNO₂.
A = Assay, percent.

7. Procedure.

7.1 Sampling. Assemble the sampling train as shown in Figure F1. Add 50 ml. absorbing reagent to the absorber. Disconnect funnel, insert calibrated flowmeter, and measure flow before sampling. If flow rate before sampling is less than 85 percent of needle calibration, check for leak or change filters as necessary. Remove flowmeter and replace funnel. Sample for 24 hours from midnight to midnight and measure flow at end of sampling period.

7.2 Analysis. Replace any water lost by evaporation during sampling. Pipet 10 ml. of the collected sample into a test tube. Add 1.0 ml. hydrogen peroxide solution, 10.0 ml. sulfanilamide solution, and 1.4 ml. NEDA solution with thorough mixing after the addition of each reagent. Prepare a blank in the same manner using 10 ml. absorbing reagent. After a 10-minute color-development interval, measure the absorbance at 540 nm. against the blank. Read μg. NO₂/ml. from standard curve (Section 8.2).

8. Calibration and Efficiencies.

8.1 Sampling.

8.1.1 Calibration of Flowmeter. Using a wet test meter and a stopwatch, determine the rates of air flow (ml./min.) through the flowmeter at several ball positions. Plot ball positions versus flow rates.

8.1.2 Calibration of Hypodermic Needle. Connect the calibrated flowmeter, the needle to be calibrated, and the source of vacuum in such a way that the direction of airflow through the needle is the same as in the sampling train. Read the position of the ball and determine flow rate in ml./min. from the calibration chart prepared in 8.1.1. Reject all needles not having flow rates of 190 to 210 ml./min. before sampling.

8.2 Calibration Curve. Dilute 5.0 ml. of the 1,000 μg. NO₂/ml. solution to 200 ml.

with absorbing reagent. This solution contains 25 μg. NO₂/ml. Pipet 1, 2, 5, and 15 ml. of the 25 μg. NO₂/ml. solution into 50-, 50-, 100-, and 250-ml. volumetric flasks and dilute to the mark with absorbing reagent. The solutions contain 0.50, 1.00, 1.25, and 1.50 μg. NO₂/ml., respectively. Run standards as instructed in 7.2. Plot absorbance vs. μg. NO₂/ml.

8.3 Efficiencies. An overall average efficiency of 35 per cent was obtained from test atmospheres having nitrogen dioxide concentrations of 140 μg./m.³ and 200 μg./m.³ by automated analysis.(2)

9. Calculation.

9.1 Sampling.

9.1.1 Calculate volume of air sampled.

$$V = \frac{F_1 + F_2}{2} \times T \times 10^{-6}$$

V = Volume of air sampled, m.³

F₁ = Measured flow rate before sampling, ml./min.

F₂ = Measured flow rate after sampling, ml./min.

T = Time of sampling, min.

10⁻⁶ = Conversion of ml. to m.³

9.2 Calculate the concentration of nitrogen dioxide as μg. NO₂/m.³

$$\mu\text{g. NO}_2/\text{m.}^3 = \frac{(\mu\text{g. NO}_2/\text{ml.}) \times 50}{V \times 0.35} = \frac{(\mu\text{g. NO}_2/\text{ml.}) \times 143}{V}$$

50 = Volume of absorbing reagent used in sampling, ml.

V = Volume of air sampled, m.³

0.35 = Efficiency.

9.2.1 If desired, concentration of nitrogen dioxide may be calculated as p.p.m. NO₂.

$$\text{p.p.m.} = (\mu\text{g. NO}_2/\text{m.}^3) \times 5.32 \times 10^{-4}$$

10. References.

- (1) Jacobs, M. B., and Hochheiser, S., "Continuous Sampling and Ultramicrodetermination of Nitrogen Dioxide in Air", *Anal. Chem.*, 30 426 (1958).
- (2) Purdue, L. J., Dudley, J. E., Clements, J. B., and Thompson, R. J., "Studies in Air Sampling for Nitrogen Dioxide," I. A reinvestigation of the Jacobs-Hochheiser Reagent. In Preparation.

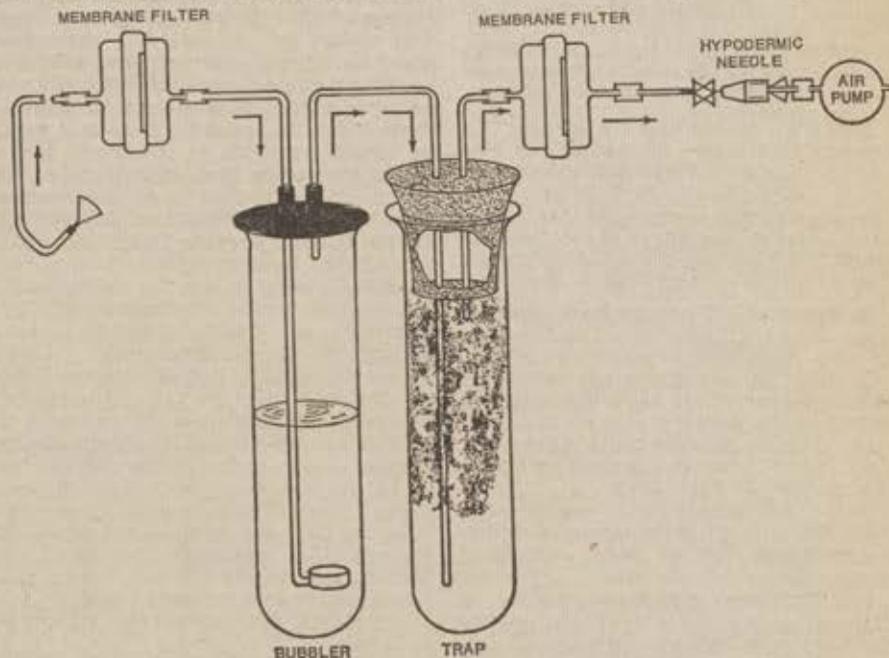


Figure F1. Sampling train.

* Available from Bel-Art Products, Pequannock, N.J.

PART 51—REQUIREMENTS FOR PREPARATION, ADOPTION, AND SUBMITTAL OF IMPLEMENTATION PLANS

Subpart A—General Provisions

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51.4	Public hearings.
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51.8	Approval of plans.

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Appendix I	Projected Motor Vehicle Emissions.
Appendix J	Required Hydrocarbon Emission Control as a Function of Photochemical Oxidant Concentrations.
Appendix K	Control Agency Functions.
Appendix L	Example Regulations for Prevention of Air Pollution Emergency Episodes.

AUTHORITY: The provisions of this Part 51 issued under section 301(a) of the Clean Air Act (42 U.S.C. 1857(a), as amended by section 15(c) (2) of Public Law 91-604, 84 Stat. 1713.

Subpart A—General Provisions

§ 51.1 Definitions.

As used in this part, all terms not defined herein shall have the meaning given them in the Act:

(a) "Act" means the Clean Air Act (42 U.S.C. 1857-1857i, as amended by Public Law 91-604, 84 Stat. 1676).

(b) "Administrator" means the Administrator of the Environmental Protection Agency (EPA) or his authorized representative.

(c) "Primary standard" means a national primary ambient air quality standard promulgated pursuant to section 109 of the Act.

(d) "Secondary standard" means a national secondary ambient air quality standard promulgated pursuant to section 109 of the Act.

(e) "National standard" means either a primary or a secondary standard.

(f) "Plan" means an implementation plan, under section 110 of the Act, to attain and maintain a national standard.

(g) "Applicable plan" means a plan or portion thereof, or the most recent revision of such plan or portion thereof, which has been approved or promulgated by the Administrator pursuant to section 110 of the Act.

(h) "Regional Office" means one of the ten (10) EPA Regional Offices.

(i) "State agency" means the air pollution control agency primarily responsible for development and implementation of a plan under the Act.

(j) "Local agency" means any air pollution control agency other than a State agency, which is charged with responsibility for carrying out a portion of a plan.

(k) "Point source" means:

(1) Any stationary source causing emissions in excess of 100 tons (90.7 metric tons) per year of any pollutant for which there is a national standard in a region containing an area whose 1970 "urban place" population, as defined by the Bureau of Census, was equal to or greater than 1 million or

(2) Any stationary source causing emissions in excess of 25 tons (22.7 metric tons) per year of any pollutant for which there is a national standard in a region containing an area whose 1970 "urban place" population, as defined by the U.S. Bureau of the Census, was less than 1 million and

(3) Without regard to amount of emissions, stationary sources such as those listed in Appendix C to this part.

(l) "Area source" means any small residential, governmental, institutional, commercial, or industrial fuel combustion operations: onsite solid waste disposal facility; motor vehicles, aircraft, vessels, or other transportation facilities; or other miscellaneous sources such as those listed in Appendix D to this part, as identified through inventory techniques similar to those described in: "A Rapid Survey Technique for Estimating Community Air Pollution Emissions," Public Health Service Publication No. 999-AP-29, October 1966.

(m) "Region" means (1) an air quality control region designated by the Secretary of Health, Education, and Welfare or the Administrator, (2) any area designated by a State agency as an air quality control region and approved by the Administrator, or (3) any area of a State not designated as an air quality control region under subparagraph (1) or (2) of this paragraph.

(n) "Control strategy" means a combination of measures designated to achieve the aggregate reduction of emissions necessary for attainment and maintenance of a national standard, including, but not limited to, measures such as:

(1) Emission limitations.

(2) Federal or State emission charges or taxes or other economic incentives or disincentives.

(3) Closing or relocation of residential, commercial, or industrial facilities.

(4) Changes in schedules or methods of operation of commercial or industrial facilities or transportation systems, including, but not limited to, short-term changes made in accordance with standby plans.

(5) Periodic inspection and testing of motor vehicle emission control systems, at such time as the Administrator determines that such programs are feasible and practicable.

(6) Emission control measures applicable to in-use motor vehicles, including, but not limited to, measures such as mandatory maintenance, installation of emission control devices, and conversion to gaseous fuels.

(7) Measures to reduce motor vehicle traffic, including, but not limited to, measures such as commuter taxes, gasoline rationing; parking restrictions, or staggered working hours.

(8) Expansion or promotion of the use of mass transportation facilities through measures such as increases in the frequency, convenience, and passenger-carrying capacity of mass transportation systems or providing for special bus lanes on major streets and highways.

(9) Any land use or transportation control measures not specifically delineated herein.

(10) Any variation of, or alternative to, any measure delineated herein.

(o) "Reasonably available control technology" means devices, systems, process modifications, or other apparatus or techniques, the application of which will permit attainment of the emission limitations set forth in Appendix B to this part, provided that Appendix B to this part is not intended, and shall not be construed, to require or encourage State agencies to adopt such emission limitations without due consideration of (1) the necessity of imposing such emission limitations in order to attain and maintain a national standard, (2) the social and economic impact of such emission limitations, and (3) alternative means of providing for attainment and maintenance of such national standard.

§ 51.2 Stipulations.

Nothing in this part shall be construed in any manner:

(a) To encourage a State to prepare, adopt, or submit a plan which does not provide for the protection and enhancement of air quality so as to promote the public health and welfare and productive capacity.

(b) To encourage a State to adopt any particular control strategy without taking into consideration the cost-effectiveness of such control strategy in relation to that of alternative control strategies.

(c) To preclude a State from employing techniques other than those specified in this part for purposes of estimating air quality or demonstrating the adequacy of a control strategy, provided that such

other techniques are shown to be adequate and appropriate for such purposes.

(d) To encourage a State to prepare, adopt, or submit a plan without taking into consideration the social and economic impact of the control strategy set forth in such plan, including, but not limited to, impact on availability of fuels, energy, transportation, and employment.

(e) To preclude a State from preparing, adopting, or submitting a plan which provides for attainment and maintenance of a national standard through the application of a control strategy not specifically identified or described in this part.

(f) To preclude a State or political subdivision thereof from adopting or enforcing any emission limitations or other measures or combinations thereof to attain and maintain air quality better than that required by a national standard.

(g) To encourage a State to adopt a control strategy uniformly applicable throughout a region unless there is no satisfactory alternative way of providing for attainment and maintenance of a national standard throughout such region.

§ 51.3 Classification of regions.

This section establishes a classification system to categorize regions for

purposes of plan development and evaluation. The requirements of this part vary according to the classification of each region, in order that the time and resources to be expended in developing the plan for that region, as well as the substantive content of the plan, will be commensurate with the complexity of the air pollution problem. The classification will be based upon measured ambient air quality, where known, or, where not known, estimated air quality in the area of maximum pollutant concentration. All regions will be classified by the Administrator after consultation with State agencies. Each region will be classified separately with respect to each of the following pollutants: Sulfur oxides, particulate matter, carbon monoxide, nitrogen dioxide, and photochemical oxidants.

(a) For sulfur oxides and particulate matter, each region will be classified into one of three categories, defined as Priority I, Priority II, or Priority III.

(1) (i) Ambient concentration limits, expressed as micrograms per cubic meter and parts per million by volume (p.p.m. in parentheses) which define the classification system for sulfur oxides and particulate matter are:

Pollutant	Priority		
	I	II	III
Sulfur oxides:			
Annual arithmetic mean.....	Greater than 100 (0.04)	From-To 60-100 (0.02-0.04)	Less than 60 (0.02)
24-hour maximum.....	455 (0.17)	260-455 (0.10-0.17)	260 (0.10)
3-hour maximum.....		1-1,300 (0.50)	1,300 (0.50)
Particulate matter:			
Annual geometric mean.....	95	60-95	60
24-hour maximum.....	325	150-325	150

¹ Any concentration above 1,300 µg/m³ (0.50 p.p.m.).

(ii) The more restrictive classification will be chosen where there is a difference between the maximum value(s) and the annual averages e.g., if a region is Priority I with respect to an annual average and Priority II with respect to a 24-hour maximum value, the classification will be Priority I.

(2) Procedures which may be used, where appropriate, to estimate air quality in regions where no measured data or inadequate data exist are described in Appendix A to this part.

(b) For carbon monoxide, nitrogen dioxide, and photochemical oxidants, each region will be classified into one of two categories defined as Priority I or Priority III.

(1) Ambient concentration limits which define the classification system are:

(i) Carbon monoxide: Priority I: Equal to or above 55 milligrams per cubic meter (48 p.p.m.), 1-hour maximum, or 14 milligrams per cubic meter (12 p.p.m.), 8-hour maximum; Priority III: Below such values.

(ii) Nitrogen dioxide: Priority I: Equal to or above 110 micrograms per cubic meter (0.06 p.p.m.) annual arithmetic mean; Priority III: Below such value.

(iii) Photochemical oxidants: Priority I: Equal to or above 195 micrograms per cubic meter (0.10 p.p.m.), 1-hour maximum; Priority III: Below such value.

(2) In the absence of measured data to the contrary, classification with respect to carbon monoxide, photochemical oxidants and nitrogen dioxide will be based on the following estimate of the relationship between these pollutants and population: Any region containing an area whose 1970 "urban place" population, as defined in the U.S. Bureau of Census, exceeds 200,000 will be classified Priority I. All other regions will be classified Priority III.

(3) Where a region is classified Priority I on the basis of population, the air quality data requirements of § 51.14

(e) (1) shall apply. If these data indicate the pollutant concentrations are below the values stipulated in subparagraph (1) of this paragraph, the region will be reclassified Priority III.

(4) Classifications with respect to hydrocarbons will be the same as the classifications with respect to photochemical oxidants.

(c) Where a region is classified Priority I on the basis of measured or estimated air quality levels reflecting emis-

sions predominantly from a single point source, it shall be further classified Priority IA. The requirements applicable to Priority IA regions shall be the same as those for other Priority I regions, except that the requirements applicable to Priority II regions under §§ 51.16 and 51.17 shall apply. A procedure for estimating air quality levels reflecting emissions from a single point source is described in Appendix A to this part.

§ 51.4 Public hearings.

(a) The State shall, prior to adoption of a plan and after reasonable notice thereof, conduct one or more public hearings on each plan. Separate hearings may be held for plans to implement primary and secondary standards.

(b) For purposes of this part, "reasonable notice" shall be considered to include, at least 30 days prior to the date of such hearing(s):

(1) Notice given to the public by prominent advertisement announcing the date(s), time(s), and place(s) of such hearing(s) and the availability of the principal portions of the proposed plan, including, as a minimum, all rules and regulations which are proposed to be included in such plan, for public inspection in at least one location in each region to which the plan will apply.

(2) Notification to the Administrator (through the appropriate Regional Office).

(3) Notification to any local air pollution control agencies in each region to which the plan will apply.

(4) In the case of an interstate region, notification to any other States included, in whole or in part, in the region.

(c) The State shall prepare and retain, for submission to the Administrator upon his request, a record of the hearing(s). The record shall contain, as a minimum, a list of witnesses together with the text of each presentation.

(d) The State shall submit with its plan (1) a copy of any advertisement published, broadcast, or otherwise issued pursuant to this section; and (2) a certification that the hearing was held in accordance with the notice required by this section.

§ 51.5 Submission of plans; preliminary review of plans.

(a) Submission to the Administrator shall be accomplished by delivering five copies of the plan to the appropriate Regional Office and a letter to the Administrator notifying him of such action. Plans shall be adopted by the State and submitted to the Administrator by the Governor as follows:

(1) For any primary standard, within 9 months after promulgation of such standard.

(2) For any secondary standard, within 9 months after promulgation of such secondary standard or by such later date prescribed by the Administrator pursuant to Subpart C of this part.

(b) Plans for different regions within a State may be submitted as a single document or as separate documents.

(c) Upon request of a State, the Administrator will provide preliminary review of a plan or portion thereof submitted in advance of the date such plan is due. Such requests shall be made in writing to the appropriate Regional Office and shall be accompanied by five copies of the materials to be reviewed. Requests for preliminary review shall not operate to relieve a State of the responsibility of adopting and submitting plans in accordance with prescribed due dates.

§ 51.6 Revisions.

(a) The plan shall be revised from time to time, as may be necessary, to take account of:

- (1) Revisions of national standards,
- (2) The availability of improved or more expeditious methods of attaining such standards, such as improved technology or emission charges or taxes, or
- (3) A finding by the Administrator that the plan is substantially inadequate to attain or maintain the national standard which it implements.

(b) The plan shall be revised within 60 days following notification by the Administrator under paragraph (a) of this section, or by such later date prescribed by the Administrator after consultation with the State.

(c) Revisions of rules and regulations included in an applicable plan shall be adopted after reasonable notice and public hearings, as prescribed in § 51.4.

(d) Any revision of rules and regulations and of compliance schedules shall be submitted to the Administrator in accordance with § 51.5 within 60 days following its adoption.

(e) Revisions other than those covered by paragraph (b) of this section shall be identified and described in the semiannual report required by § 51.7.

§ 51.7 Reports.

(a) On a quarterly basis commencing with the end of the first full quarter after approval of a plan, or any portion thereof, by the Administrator, the State shall submit to the Administrator (through the appropriate Regional Office) information on air quality. The quarters of the year are January 1-March 31, April 1-June 30, July 1-September 30, and October 1-December 31.

(b) On a semiannual basis commencing with the end of the first full semiannual period after approval of a plan, or any portion thereof, by the Administrator, the State shall submit to the Administrator (through the appropriate Regional Office) reports on progress in carrying out the applicable plan. The semiannual periods are January 1-June 30 and July 1-December 31.

(c) The reports required by this section shall be submitted within 45 days after the end of each reporting period in a manner which shall be prescribed by the Administrator.

§ 51.8 Approval of plans.

The Administrator shall approve any plan, or portion thereof, or any revision of such plan, or portion thereof, if he

determines that it meets the requirements of the Act. Revisions of a plan, or any portion thereof, shall not be considered part of an applicable plan until such revisions have been approved by the Administrator in accordance with this part.

Subpart B—Plan Content and Requirements

§ 51.10 General requirements.

(a) During development of a plan, the State is encouraged to identify alternative control strategies, as well as the costs and benefits of each such alternative, for attainment and maintenance of the national standards.

(b) Each plan implementing a primary standard shall provide for the attainment of such standard as expeditiously as practicable, but in no case, except as otherwise provided by Subpart C of this part, later than 3 years after the date of the Administrator's approval of such plan or any revision thereof to take account of a revised primary standard. The projected date of attainment of such standard shall be specified in the plan.

(c) Each plan implementing a secondary standard shall provide for the attainment of such standard by a specified date, which shall be within a reasonable time after the date of the Administrator's approval of such plan.

(d) The plan for each region shall have adequate provisions to insure that pollutant emissions within such region will not interfere with attainment and maintenance of any national standard in any portion of an interstate region or in any other region.

(e) Each plan shall provide for public availability of emission data reported by source owners or operators or otherwise obtained by a State or local agency. Such emission data shall be correlated with applicable emission limitations or other measures. As used in this paragraph, "correlated" means presented in such a manner as to show the relationship between measured or estimated amounts of emissions and the amounts of such emissions allowable under the applicable emission limitations or other measures.

§ 51.11 Legal authority.

(a) Each plan shall show that the State has legal authority to carry out the plan, including authority to:

(1) Adopt emission standards and limitations and any other measures necessary for attainment and maintenance of national standards.

(2) Enforce applicable laws, regulations, and standards, and seek injunctive relief.

(3) Abate pollutant emissions on an emergency basis to prevent substantial endangerment to the health of persons, i.e., authority comparable to that available to the Administrator under section 303 of the Act.

(4) Prevent construction, modification, or operation of any stationary source at any location where emissions from

such source will prevent the attainment or maintenance of a national standard.

(5) Obtain information necessary to determine whether air pollution sources are in compliance with applicable laws, regulations, and standards, including authority to require recordkeeping and to make inspections and conduct tests of air pollution sources.

(6) Require owners or operators of stationary sources to install, maintain, and use emission monitoring devices and to make periodic reports to the State on the nature and amounts of emissions from such stationary sources; also authority for the State to make such data available to the public as reported and as correlated with any applicable emission standards or limitations.

(b) Where a plan sets forth a control strategy that provides for application of (1) inspection and testing of motor vehicles and/or other transportation control measures or (2) land use measures other than those referred to in § 51.11(a)(4), such plan shall set forth the State's timetable for obtaining such legal authority as may be necessary to carry out such measures.

(c) The provisions of law or regulation which the State determines provide the authorities required under this section shall be specifically identified, and copies of such laws or regulations shall be submitted with the plan.

(d) (1) Except as otherwise provided by paragraph (b) of this section, the plan shall show that the legal authorities specified in this section are available to the State at the time of submission of the plan.

(2) Legal authority adequate to fulfill the requirements of paragraph (a) (5) and (6) of this section may be delegated to the State pursuant to section 114 of the Act.

(e) A State governmental agency other than the State air pollution control agency may be assigned responsibility for carrying out a portion of a plan: *Provided*, That such plan demonstrates, to the Administrator's satisfaction, that such State governmental agency has the legal authority necessary to carry out such portion of the plan or, pursuant to paragraph (b) of this section, has a timetable for obtaining such authority.

(f) The State may authorize a local agency to carry out a plan, or portion thereof, within such local agency's jurisdiction: *Provided*, That such plan demonstrates, to the Administrator's satisfaction, that such local agency has the legal authority necessary to implement such plan, or portion thereof, and further: *Provided*, That such authorization shall not relieve the State of responsibility under the Act for carrying out such plan, or portion thereof.

§ 51.12 Control strategy: General.

(a) In any region where existing (measured or estimated) ambient levels of a pollutant exceed the levels specified by an applicable national standard, the plan shall set forth a control strategy which shall provide for the degree of emission reduction necessary for attainment and maintenance of such national

standard, including the degree of emission reduction necessary to offset emission increases that can reasonably be expected to result from projected growth of population, industrial activity, motor vehicle traffic, or other factors that may cause or contribute to increase emissions.

(b) In any region where measured or estimated ambient levels of a pollutant are below the levels specified by an applicable secondary standard, the plan shall set forth a control strategy which shall be adequate to prevent such ambient pollution levels from exceeding such secondary standard.

(c) Portions of a control strategy applicable to area sources may differ from portions applicable to point sources.

(d) For purposes of developing a control strategy, data derived from measurements of existing ambient levels of a pollutant may be adjusted to reflect the extent to which occasional natural or accidental phenomena, e.g., dust storms, forest fires, industrial accidents, demonstrably affected such ambient levels during the measurement period.

§51.13 Control strategy: Sulfur oxides and particulate matter.

(a) In any region where emission reductions are necessary for attainment and maintenance of a primary standard for sulfur oxides or particulate matter, the plan shall set forth a control strategy which shall be adjusted for the attainment of such primary standard within the time prescribed by the Act.

(b) (1) In any region where the degree of emission reduction necessary for attainment and maintenance of a secondary standard for sulfur oxides or particulate matter can be achieved through the application of reasonably available control technology, "reasonable time" for attainment of such secondary standard, pursuant to § 51.10(c), shall be not more than 3 years unless the State shows that good cause exists for postponing application of such control technology.

(2) In any region where application of reasonably available control technology will not be sufficient for attainment and maintenance of such secondary standard, or where the State shows that good cause exists for postponing the application of such control technology, "reasonable time" shall depend on the degree of emission reduction needed for attainment of such secondary standard and on the social, economic, and technological problems involved in carrying out a control strategy adequate for attainment and maintenance of such secondary standard.

(c) For purposes of developing a control strategy, background concentration shall be taken into consideration with respect to particulate matter. As used in this subpart, "background concentration" is that portion of the measured ambient levels of particulate matter that cannot be reduced by controlling emissions from manmade sources; "background concentration" shall be determined by reference to measured ambient

levels of particulate matter in nonurban areas.

(d) Example regions:

(1) A control strategy which provides for the attainment and maintenance of a national standard for sulfur oxides or particulate matter in any region in a State (excluding Priority IA regions) will be deemed by the Administrator to be adequate for attainment and maintenance of such standard in any or all other regions of the same Priority classification in which measured or estimated levels of the pollutant are lower than those in the region for which the control strategy was formulated: *Provided*, That such control strategy is sufficiently comprehensive to include adequate control of sulfur oxides or particulate emissions from sources listed in Appendix C to this part. Any region (i) for which the State formulates a control strategy which is applied to other regions or (ii) for which a control strategy is developed, without regard to whether such strategy is applied outside of the region, is referred to hereinafter as an "example region."

(2) The State shall obtain, through the appropriate Regional Office, the concurrence of the Administrator in the selection of an example region.

(3) Nothing in this section shall be construed in any manner to preclude a State from preparing, adopting, and submitting a separate plan for each region.

(e) Adequacy of control strategy:

(1) The plan shall demonstrate that the control strategy for each national standard for sulfur oxides or particulate matter is adequate for attainment and maintenance of such standard in the example region(s) to which it applies. The adequacy of a control strategy shall be demonstrated by means of a proportional model or diffusion model or other procedure which is shown to be adequate and appropriate for such purpose.

(2) (i) If such demonstration is made by use of a proportional model, such model shall be one in which the following equation is employed to calculate the degree of improvement in air quality needed for attainment of a national standard:

$$\frac{A-C}{A-B} \times 100 = \text{percent reduction needed}$$

Where:

- A = Existing air quality at the location having the highest measured or estimated concentration in the region.
B = Background concentration.
C = National standard.

(ii) The above equation does not account for topography, spatial distribution of emissions, or stack height, but the significance of these parameters shall be considered in developing the control strategy.

(iii) The plan shall show that application of the control strategy will result in the degree of emission reduction indicated to be necessary by the above calculation, as modified by appropriate consideration of factors set forth in subdivision (ii) of this subparagraph. The plan shall contain a summary of the computations used to determine the emission

reductions that will result from application of the control strategy to each point source and group of area sources; such summary shall be included in a table similar to that presented in Appendix D to this part. The detailed computations shall be retained and be made available for inspection by the Administrator.

(3) (i) If such demonstration is made by use of a diffusion model, such model shall be identified and described: *Provided, however*, That if either of the two diffusion models described in the following publications is used, it need only be identified:

Air Quality Implementation Planning Program (IPP), Volume I, Operator's Manual, National Air Pollution Control Administration, Environmental Protection Agency, Washington, D.C., November 1970.

Air Quality Display Model (AQDM), National Air Pollution Control Administration, Department of Health, Education, and Welfare, Washington, D.C., November 1969.

(ii) The plan shall contain a summary of emission levels expected to result from application of the control strategy, which summary shall be included in a table similar to that presented in Appendix D to this part.

(iii) The plan shall also show the air quality levels expected to result from application of the control strategy, presented either in tabular form or as an isopleth map showing maximum pollutant concentrations and expected concentration gradients. Computer printouts of the input and output data associated with use of a diffusion model shall be retained and made available for inspection by the Administrator.

(f) Emission data:

(1) Each plan shall include the following data on emissions of sulfur oxides and particulate matter:

(i) For each example region in the State, a detailed inventory of emissions from point sources and area sources in each county shall be summarized in a form similar to that shown in Appendix D, and the data described in Appendices E and F to this part shall be retained and made available for inspection by the Administrator.

(ii) For all regions, point-source and area-source data shall be submitted in summary form, as shown in Appendix G, except that for regions classified as Priority III, only point-source data and any existing area-source data shall be submitted. Data described in Appendices E and F to this part shall be retained and made available for inspection by the Administrator.

(g) Air quality data: Data showing existing air quality with respect to sulfur dioxide and particulate matter shall be submitted for each example region. Actual measurements shall be used where available if based on use of the measurement methods specified in § 51.17; sulfur dioxide measurements based on use of the continuous conductimetric method also will be acceptable for this purpose. If actual measurements are not available and cannot be made in time to be

employed in the development of the control strategy, air quality may be estimated by the procedure described in Appendix A to this part. Air quality data, whether measured or estimated, shall be submitted in a form similar to that shown in Appendix H to this part.

§ 51.14 Control strategy: Carbon monoxide, hydrocarbons, photochemical oxidants, and nitrogen dioxide.

(a) *Priority I Regions.* (1) Each plan for a region classified Priority I with respect to carbon monoxide, photochemical oxidants, or nitrogen dioxide shall set forth a control strategy which shall provide for the degree of emission reduction necessary for attainment and maintenance of the national standard for each such pollutant after consideration of the emission reductions that will result from the application of Federal motor vehicle emission standards promulgated pursuant to section 202 of the Act.

(2) Unless specific data are available for a region, a State shall assume that such Federal motor vehicle emission standards will result in the emission reductions shown in Appendix I to this part. If specific data are used, such data must be submitted in the plan for such region.

(b) *Control strategy development.* In a region in which attainment and maintenance of a national standard will require emission reductions in addition to those which will result from application of the Federal motor vehicle emission standards, the control strategy shall provide for application of such other measures as may be necessary for attainment and maintenance of such national standard.

(c) *Adequacy of control strategy.* (1) The plan shall demonstrate, by means of a proportional model or diffusion/photochemical model or other procedure which is adequate and appropriate, that the control strategy included in each plan for a region classified as Priority I is adequate for attainment and maintenance of the national standard(s) to which such control strategy applies.

(2) With respect to control of carbon monoxide and nitrogen oxides, the proportional model which may be used for purposes of this paragraph is described in § 51.13(e) (2): *Provided*, With respect to the national standard for nitrogen dioxide, that the degree of air quality improvement indicated to be necessary by the proportional model will be achieved by a corresponding degree of reduction of total nitrogen oxides emissions from stationary and mobile sources.

(3) In any region where the degree of nitrogen oxides emission reduction necessary for attainment and maintenance of the national standard for nitrogen dioxide is greater than that which can be achieved by the application of (1) the Federal motor vehicle emission standards promulgated under section 202 of the Act, (ii) reasonably available control technology to nitrogen oxides sources, and (iii) any transportation control measures which may be necessary

for attainment and maintenance of the national standards for carbon monoxide and photochemical oxidants, the plan shall provide for the degree of hydrocarbon emission reduction attainable through the application of reasonably available control technology. In any such region, a control strategy which provides for such hydrocarbon emission reduction shall be deemed adequate for attainment of the national standard for nitrogen dioxide.

(4) With respect to hydrocarbons and photochemical oxidants, it may be assumed that (i) there is no background concentration of photochemical oxidants and (ii) the degree of total hydrocarbon emission reduction necessary for attainment and maintenance of the national standard for photochemical oxidants will also be adequate for attainment of the national standard for hydrocarbons. The proportional model to be used to determine the necessary hydrocarbon emission reduction is set forth in Appendix J to this part.

(5) The plan shall show that the control strategy will result in the degree of emission reduction indicated to be necessary by the proportional model. The

plan shall contain a summary of the computations used to determine the emission reductions that will result from application of the control strategy to each point source and each group of area sources. Such summary shall be included in a table similar to that presented in Appendix D to this part. The detailed computations shall be retained by the State agency and made available for inspection by the Administrator.

(6) If a diffusion/photochemical model is used, the plan shall include a description of such model.

(d) *Emission data.* Emission data on carbon monoxide, hydrocarbons, and nitrogen oxides shall be submitted in accordance with the requirements of § 51.13(f).

(e) *Air quality data.* Data showing existing air quality levels shall be presented in accordance with this section:

(1) For Priority I regions, data on carbon monoxide, nitrogen dioxide, and photochemical oxidants shall, as a minimum, include the results of measurements made during a period of approximately 3 months beginning on or about July 1, 1971, in accordance with the following procedures.

Pollutants	Measurement method ¹	Number of sites per region	Frequency of sampling
Carbon monoxide.....	Nondispersive infrared.....	One.....	Continuous.
Nitrogen dioxide.....	24-hour (gas bubbler) methods..... (Jacobs-Hochheiser).	do.....	One 24-hour sample, every 3 days.
Photochemical oxidants.....	Gas phase chemiluminescence.....	do.....	Continuous.

¹ Equivalent methods are specified in § 420.17.

(2) For Priority I regions, only available air quality data for hydrocarbons must be submitted.

(3) For Priority III regions, no air quality data for carbon monoxide, hydrocarbons, nitrogen dioxide, and photochemical oxidants need be submitted.

(4) Air quality data required by this subparagraph shall be submitted in the form similar to that shown in Appendix H to this part.

§ 51.15 Compliance schedules.

(a) (1) Except as otherwise provided in subparagraph (2) of this paragraph, each plan shall contain legally enforceable compliance schedules setting forth the dates by which all stationary and mobile sources or categories of such sources must be in compliance with any applicable portions of the control strategy set forth in such plan.

(2) A plan may provide that a legally enforceable compliance schedule will be negotiated with the owner or operator of an individual source following submittal of the plan. Such compliance schedule shall be submitted to the Administrator as early as possible but in no case later than the prescribed date for submittal of the first semiannual report required by § 51.7. Unless disapproved by the Administrator, such compliance schedule shall be part of the applicable plan.

(b) (1) Any compliance schedule designed to provide for attainment and maintenance of a primary standard shall

provide for compliance with applicable portions of the control strategy as expeditiously as practicable and in no case, except as otherwise provided by Subpart C of this part, later than 3 years after the Administrator's approval of the plan, or portion thereof, which sets forth such control strategy.

(2) Any compliance schedule designed to provide for attainment and maintenance of a secondary standard shall provide for compliance with applicable portions of the control strategy in a reasonable time and in no case later than the date specified for attainment of such secondary standard pursuant to § 51.10(c).

(c) Any compliance schedule extending over a period of 18 or more months from the date of its adoption shall provide for periodic increments of progress toward compliance by any affected source(s) or categories of sources.

(d) Except as otherwise provided by Subpart C of this part, neither the State agency nor a local agency shall grant any variance of, or exception to, any compliance schedule included in an applicable plan if such variance or exception will prevent, or interfere with, attainment or maintenance of a national standard within the time(s) specified pursuant to § 51.10 (b) and (c).

§ 51.16 Prevention of air pollution emergency episodes.

(a) For the purpose of preventing air pollution emergency episodes, each plan

for a Priority I region shall include a contingency plan which shall, as a minimum, provide for taking any emission control actions necessary to prevent ambient pollutant concentrations at any location in such region from reaching levels which would constitute imminent and substantial endangerment to the health of persons, which levels shall be prescribed by the Administrator.

(b) Each contingency plan shall (1) specify two or more stages of episode criteria such as those set forth in Appendix L to this part, or their equivalent (2) provide for public announcement whenever any episode stage has been determined to exist, and (3) specify emission control actions to be taken at each episode stage, including, but not necessarily limited to, actions such as those set forth in Appendix L to this part, or their equivalent.

(c) (1) For each stationary source emitting 100 tons (90.7 metric tons) per year or more, the contingency plan shall include, or provide for preparation of, a specific legally enforceable emission control action program and shall show that the owner and/or operator of such stationary source has been notified of the requirements of such emission control action program.

(2) Any emission control action programs required by subparagraph (1) of

this paragraph which are not included in the contingency plan shall be submitted to the Administrator in the first semi-annual report required under § 51.7. Unless disapproved by the Administrator, such emission control action programs shall be part of the applicable plan.

(d) To the maximum extent practicable, emission control actions taken pursuant to a contingency plan shall be consistent with the extent of any air pollution episode, e.g., if a single source is determined to be responsible for the occurrence of any episode stage, then the emission control action steps applicable to such source shall be taken.

(e) Each contingency plan for a Priority I region shall provide for:

(1) Daily acquisition of forecasts of atmospheric stagnation conditions or during any episode stage and updating of such forecasts at least every 12 hours.

(2) Inspection of sources to ascertain compliance with applicable emission control action requirements.

(3) Communications procedures for transmitting status reports and orders as to emission control actions to be taken during an episode stage, including procedures for contact with public officials, major emission sources, public health,

safety, and emergency agencies and news media.

(f) In the event that the requirements of paragraphs (c) and (e) of this section have not been fully met by the prescribed date for submitting a plan, a description of the steps under consideration and a timetable for their completion shall be submitted with the plan. Such timetable shall provide for meeting all requirements of paragraphs (c) and (e) of this section within 1 year after such prescribed date. A description of interim actions that will be taken to control emissions during any episode stage which occurs during such 1-year period shall be included.

(g) Each plan for a Priority II region shall include a contingency plan meeting, as a minimum, the requirements of subparagraphs (1) and (2) or paragraph (b) of this section.

§ 51.17 Air quality surveillance.

(a) (1) The plan shall provide for the establishment of an air quality surveillance system which shall be completed and in operation as expeditiously as practicable, but not later than 2 years after the date of the Administrator's approval of the plan, and which shall meet, as a minimum, the following requirements:

Classification of region	Pollutant	Measurement method ¹	Minimum frequency of sampling	Region population	Minimum number of air quality monitoring sites ²	
I.....	Suspended particulates.....	High volume sampler.....	One 24-hour sample every 6 days ^a .	Less than 100,000.....	4.	
				100,000-1,000,000.....	4+0.5 per 100,000 population.*	
					1,000,001-5,000,000.....	7.5+0.25 per 100,000 population.**
					Above 5,000,000.....	12+0.16 per 100,000 population.
		Tape sampler.....	One sample every 2 hours.....		One per 250,000 population ^c up to eight sites.	
	Sulfur dioxide.....	Pararosaniline or equivalent ⁴ .	One 24-hour sample every 6 days (gas bubbler). ^a	Less than 100,000.....	3.	
				100,000-1,000,000.....	2.5+0.5 per 100,000 population.*	
				1,000,001-5,000,000.....	6+0.15 per 100,000 population.**	
				Above 5,000,000.....	11+0.05 per 100,000 population.	
		Continuous.....		Less than 100,000.....	1.	
			100,000-5,000,000.....	1+0.15 per 100,000 population.*		
			Above 5,000,000.....	6+0.05 per 100,000 population.*		
Carbon monoxide.....	Nondispersive infrared or equivalent. ⁵	Continuous.....	Less than 100,000.....	1.		
			100,000-5,000,000.....	1+0.15 per 100,000 population.*		
			Above 5,000,000.....	6+0.05 per 100,000 population.*		
Photochemical oxidants.....	Gas phase chemiluminescence or equivalent. ⁶	Continuous.....	Less than 100,000.....	1.		
			100,000-5,000,000.....	1+0.15 per 100,000 population.*		
			Above 5,000,000.....	6+0.05 per 100,000 population.*		
Nitrogen dioxide.....	24-hour sampling method (Jacobs-Hochheiser method).	One 24-hour sample every 14 days (gas bubbler). ^b	Less than 100,000.....	3.		
			100,000-1,000,000.....	4+0.6 per 100,000 population.*		
			Above 1,000,000.....	10.		
II.....	Suspended particulates.....	High volume sampler.....	One 24-hour sample every 6 days ^a .		3.	
					1.	
		Tape sampler.....	One sample every 2 hours.....		1.	
Sulfur dioxide.....	Pararosaniline or equivalent ⁴ .	One 24-hour sample every 6 days (gas bubbler). ^a		3.		
				1.		
				1.		
III ^e	Suspended particulates.....	High volume sampler.....	One 24-hour sample every 6 days ^a .		1.	
					1.	
		Sulfur dioxide.....	Pararosaniline or equivalent ⁴ .	One 24-hour sample every 6 days (gas bubbler). ^a		1.

^a Equivalent to 61 random samples per year.

^b Equivalent to 26 random samples per year.

^c Total population of a region. When required number of samplers includes a fraction, round-off to nearest whole number.

^d Equivalent methods are: (1) Gas Chromatographic Separation—Flame Photometric Detection (provided Teflon is used throughout the instrument system in parts exposed to the air stream), (2) Flame Photometric Detection (provided interfering sulfur compounds present in significant quantities are removed), (3) Coulometric Detection (provided oxidizing and reducing interferences such as O₂, NO₂, and H₂S are removed), and (4) the automated Pararosaniline Procedure.

^e Equivalent method is Gas Chromatographic Separation—Catalytic Conversion—Flame Ionization Detection.

^f Equivalent methods are (1) Potassium Iodide Colorimetric Detection (provided a correction is made for SO₂ and NO₂), (2) UV Photometric Detection of Ozone (provided compensation is made for interfering substances), and (3) Chemiluminescence Methods differing from that of the reference method.

^g It is assumed that the Federal motor vehicle emission standards will achieve and maintain the national standards for carbon monoxide, nitrogen dioxide, and photochemical oxidants; therefore, no monitoring sites are required for these pollutants.

^h In interstate regions, the number of sites required should be prorated to each State on a population basis.

ⁱ All measurement methods, except the Tape Sampler method, are described in the national primary and secondary ambient air quality standards published in the FEDERAL REGISTER on Apr. 30, 1971 (36 F.R. 5185). Other methods together with those specified under footnotes (d), (e), and (f) will be considered equivalent if they meet the following performance specifications:

Specification	Pollutants		
	Sulfur dioxide	Carbon monoxide	Photochemical oxidant (corrected for NO ₂ and SO ₂)
Range	0-2,620 µg./m. ³ (0-1 p.p.m.)	0-88 mg./m. ³ (0-30 p.p.m.)	0-880 µg./m. ³ (0-0.5 p.p.m.)
Minimum detectable sensitivity	26 µg./m. ³ (0.01 p.p.m.)	0.6 mg./m. ³ (0.5 p.p.m.)	20 µg./m. ³ (0.01 p.p.m.)
Rise time, 90 percent	5 minutes	5 minutes	5 minutes
Fall time, 90 percent	5 minutes	5 minutes	5 minutes
Zero drift	±1 percent per day and ±2 percent per 3 days	±1 percent per day and ±2 percent per 3 days	±1 percent per day and ±2 percent per 3 days
Span drift	±1 percent per day and ±2 percent per 3 days	±1 percent per day and ±2 percent per 3 days	±1 percent per day and ±2 percent per 3 days
Precision	±2 percent	±4 percent	±4 percent
Operation period	3 days	3 days	3 days
Noise	±0.5 percent (full scale)	±0.5 percent (full scale)	±0.5 percent (full scale)
Interference equivalent	26 µg./m. ³ (0.01 p.p.m.)	1.1 mg./m. ³ (1 p.p.m.)	20 µg./m. ³ (0.01 p.p.m.)
Operating temperature fluctuation	±5° C	±5° C	±5° C
Linearity	2 percent (full scale)	2 percent (full scale)	2 percent (full scale)

The various specifications are defined as follows:

Range: The minimum and maximum measurement limits.

Minimum detectable sensitivity: The smallest amount of input concentration which can be detected as concentration approaches zero.

Rise time 90 percent: The interval between initial response time and time to 90 percent response after a step increase in inlet concentration.

Fall time 90 percent: The interval between initial response time and time to 90 percent response after a step decrease in the inlet concentration.

Zero drift: The change in instrument output over a stated time period of unadjusted continuous operation, when the input concentration is zero.

Span drift: The change in instrument output over a stated period of unadjusted continuous operation, when the input concentration is a stated upscale value.

Precision: The degree of agreement between repeated measurements of the same concentration (which shall be the midpoint of the stated range) expressed as the average deviation of the single results from the mean.

Operation period: The period of time over which the instrument can be expected to operate unattended within specifications.

Noise: Spontaneous deviations from a mean output not caused by input concentration changes.

Interference equivalent: The portion of indicated concentration due to the total of the interferences commonly found in ambient air.

Operating temperature fluctuation: The ambient temperature fluctuation over which stated specifications will be met.

Linearity: The maximum deviation between an actual instrument reading and the reading predicted by a straight line drawn between upper and lower calibration points.

(2) At least one sampling site must be located in the area of estimated maximum pollutant concentrations.

(b) The plan shall include a description of the existing and proposed air quality surveillance system, which shall set forth:

(1) The basis for the design of the surveillance system, selection of samplers, and sampling sites.

(2) The locations of the samplers by Universal Transverse Mercator (UTM) grid coordinates or the equivalent. Any EPA monitoring station may be designated as a sampler location.

(3) The sampling schedules.

(4) The methods of sampling and analysis.

(5) The method of data handling and analysis procedures.

(6) The timetable for the installation of any additional equipment needed to complete the system.

(c) The plan shall provide for monitoring of air quality during any air pollution emergency episode stage. The stations selected for use during such periods must be in operation within 1 year after the date of the Administrator's approval of the plan and be capable of indicating when pollutant concentrations have reached, or are approaching, any episode criteria established pursuant to § 51.16.

§ 51.18 Review of new sources and modifications.

(a) Each plan shall set forth legally enforceable procedures that will be used to implement the authority described in § 51.11(a)(4), which procedures shall be adequate to enable the State to determine whether construction or modification of stationary sources will result in violations of applicable portions of the control strategy or will interfere with attainment or maintenance of a national standard.

(b) Such procedures shall provide for the submission, by the owner or operator of a new stationary source, or existing source which is to be modified, of such

information on the nature and amounts of emissions, locations, design, construction, and operation of such sources as may be necessary to permit the State agency to make the determination referred to in paragraph (a) of this section.

(c) Such procedures shall also include means of disapproving such construction or modification if it will result in a violation of applicable portions of the control strategy or will interfere with attainment or maintenance of a national standard.

(d) Such procedures shall provide that approval of any construction or modification shall not affect the responsibility of the owner or operator to comply with applicable portions of the control strategy.

§ 51.19 Source surveillance.

Each plan shall provide for monitoring the status of compliance with any rules and regulations which set forth any portion of the control strategy. Specifically, each plan shall, as a minimum, provide for:

(a) Legally enforceable procedures for requiring owners or operators of stationary sources to maintain records of, and periodically report to the State information on, the nature and amount of emissions from such stationary sources and/or such other information as may be necessary to enable the State to determine whether such sources are in compliance with applicable portions of the control strategy.

(b) Periodic testing and inspection of stationary sources.

(c) Establishment of a system for detecting violations of any rules and regulations through the enforcement of appropriate visible emission limitations and for investigating complaints.

§ 51.20 Resources.

Each plan shall include a description of the resources available to the State and local agencies at the date of submission of the plan and of any additional resources needed to carry out the plan during the 5-year period following its

submission. Such description, which shall be provided in a form similar to that in Appendix K to this part, shall include projections of the extent to which resources will be acquired at 1-, 3-, and 5-year intervals.

§ 51.21 Intergovernmental cooperation.

(a) For the purpose of assisting in the development of a plan for any interstate region, the State agency responsible for implementing national standards in any portion of such an interstate region shall furnish any available data on emissions, air quality, and control strategy development, upon request, to any other State or local agency having such responsibility in any other portion of such interstate region.

(b) Each plan shall identify:

(1) The local agencies, by official title, which will participate in carrying out the plan.

(2) The responsibilities of such local agencies and the responsibilities of any State governmental agency involved in carrying out any portion of the plan.

(c) Each plan shall provide assurances that the State agency having primary responsibility for implementing national standards in any region, or portion thereof, will promptly transmit to other State agencies having similar or related responsibility in the same or other States, information on factors (e.g., construction of new industrial plants) which may significantly affect air quality in any portion of such region or in any adjoining region.

§ 51.22 Rules and regulations.

Emission limitations and other measures necessary for attainment and maintenance of any national standard, including any measures necessary to implement the requirements of § 51.11, shall be adopted as rules and regulations enforceable by the State agency. Copies of all such rules and regulations shall be submitted with the plan. Except as otherwise provided by § 51.11(b), submission of a plan setting forth proposed rules and regulations will not satisfy the

requirements of this section nor will it be considered a timely submittal.

Subpart C—Extensions

§ 51.30 Request for 2-year extension.

(a) The Governor of a State may, at the time of submission of a plan to implement a primary standard in a Priority I region, request the Administrator to extend, for a period not exceeding 2 years, the 3-year period prescribed by the Act for attainment of the primary standard in such region.

(b) Any such request regarding an interstate region shall be submitted jointly with the requests of Governors of all States in the region, or shall show that the Governor of each State in the region has been notified of such a request.

(c) Any such request regarding attainment of a primary standard shall be submitted together with a plan which shall:

(1) Set forth a control strategy adequate for attainment of such primary standard.

(2) Show that the necessary technology or alternatives will not be available soon enough to permit full implementation of such control strategy within such 3-year period, i.e., one or more emission sources or classes of sources will be unable to comply with applicable portions of the control strategy.

(3) Provide for attainment of such primary standard as expeditiously as practicable, but in no case later than 5 years after the date of the Administrator's approval of such plan.

(d) Any showing pursuant to paragraph (c) of this section shall include:

(1) A clear identification of stationary emission sources or classes of moving sources which will be unable to comply with the applicable portions of such control strategy within a 3-year period because the necessary technology or alternatives will not be available soon enough to permit such compliance.

(2) A clear identification and justification of any assumptions made with the respect to the time at which the necessary technology or alternatives will be available.

(3) A clear identification of any alternative means of attainment of such primary standard which were considered and rejected.

(4) A showing that stationary emission sources or classes of moving sources other than those identified pursuant to subparagraph (1) of this paragraph will be required to comply, within such 3-year period, with any applicable portions of such control strategy.

(5) A showing that reasonable interim control measures are provided for in such plan with respect to emissions from the source(s) identified pursuant to subparagraph (1) of this paragraph.

§ 51.31 Request for 18-month extension.

(a) Upon request of the State made in accordance with this section, the Administrator may, whenever he determines necessary, extend, for a period not to exceed 18 months, the deadline for

submitting that portion of a plan that implements a secondary standard.

(b) Any such request will be given consideration only in the case of Priority I and Priority II regions.

(c) Any such request shall show that attainment of the secondary standards will require emission reductions exceeding those which can be achieved through the application of reasonably available control technology.

(d) Any such request for extension of the deadline with respect to any State's portion of an interstate region shall be submitted jointly with requests for such extensions from all other States within the region or shall show that all such States have been notified of such request.

(e) Any such request shall be submitted sufficiently early to permit development of a plan prior to the deadline in the event that such request is denied.

§ 51.32 Request for 1-year postponement.

(a) Pursuant to section 110(f) of the Act,¹ the Governor of a State may request, with respect to any stationary source or class of moving sources, a postponement for not more than 1 year of the applicability of any portion of the control strategy.

(b) Any such request regarding sources located in an interstate region shall show that the Governor of each State in the region has been notified of such request.

(c) Any such request shall clearly identify the source(s) and portion(s) of the control strategy which are the subject of such request and shall include information relevant to the determinations required by section 110(f) of the Act.

(d) A public hearing will be held, before the Administrator or his designee, on any such request. No such hearing will be held earlier than 1 year in advance of the prescribed date for compliance with any such portion(s) of the control strategy.

(e) No such request shall operate to stay the applicability of the portion(s) of the control strategy covered by such request.

(f) A State's determination to defer the applicability of any portion(s) of the control strategy with respect to such source(s) will not necessitate a request for postponement under this section unless such deferral will prevent attainment or maintenance of a national standard within the time specified in such plan: *Provided, however,* That any such determination will be deemed a revision of an applicable plan under § 51.6.

APPENDIX A—AIR QUALITY ESTIMATION

Ambient pollutant levels may be estimated through the application of atmospheric diffusion models. These estimates are based primarily upon the pollutant emissions, meteorology, and topography that prevails within a region. Several procedures are available for estimating air quality based on atmospheric dispersion. The complexity and sophistication of these procedures range from a few simple calculations that may be made manually to thousands of calculations that require a computer. The procedures presented here

¹ Defined term (Clean Air Act)—see definitions.

are simple and require a minimum of calculations. The two procedures presented are referred to as an area model and a point model. The area model was used to classify regions not having air quality data where the air quality levels are the result of several pollutant sources distributed throughout the region. The point model was used where the air quality results from a single point source of pollutant.

Area model. The relationship presented in figure 1 is based on the concepts of the model developed by Miller and Holzworth.² This model requires estimates of a region's average emission density, the "size" of the region, and the wind speed through the atmospheric mixing layer. A summary and description of how to use the procedure are presented here.

For discussion purposes let:

X = Estimate concentration, micrograms/cubic meter ($\mu\text{g}/\text{m}^3$)

μ = Wind speed through mixing layer, meters/second (m/s)

Q = Emission density, micrograms/square meter-second ($\mu\text{g}/\text{m}^2\text{-s}$)

C = Urban size = $\frac{1}{2}\sqrt{\text{urban area}}$, kilometers (km.)

Figure 1 is a plot of "normalized concentration" as a function of urban size and is defined to be the product of predicted concentration and wind speed divided by emission density. Concentrations are an increasing function of urban size and are directly proportional to emission density. The wind serves as a diluting agent and reduces expected pollutant concentrations.

As an example, the Standard Metropolitan Statistical Area (SMSA) of Chicago is used to compute the expected concentration of SO_2 from 1967 emissions in the Chicago area. The urban area of Chicago for computational purposes is 2,500 square km. The urban size, as defined is consequently 25 km. and thus from figure 1:

$$\frac{X\mu}{Q} = 230$$

For Chicago:

$$Q = 17.8 \frac{\mu\text{g}/\text{sec}}{\text{meter}^2}$$

$$\mu = 7.3 \text{ meters/sec}$$

and hence:

$$X = \frac{(230)(17.8)}{7.3} = 561 \mu\text{g}/\text{m}^3$$

Using this procedure, concentration estimates for both SO_2 and particulate matter may be made on a regional basis. These predicted air quality concentrations may be used to establish region classification.

Point Model. The ambient air quality concentrations that result from the emissions of a single point source have a large degree of variability depending upon the meteorological conditions. Because of this, the short-term air quality concentrations are of more concern than the long-term. In many cases, the short-term maximum concentrations occur when the plume is trapped in a mixing layer of limited depth. In these cases, the 1-hour ground level concentration from a single point source may be estimated from the following equation:³

$$X = \frac{Q}{\sqrt{2\pi\sigma_y L u}}$$

² Miller, M.E., and Holzworth, G.C., "An Atmospheric Diffusion Model for Metropolitan Areas", Jour. Air Poll. Cont. Assoc., 17: 46-50; Jan. 1967.

³ Turner, D. B., "Workbook of Atmospheric Dispersion Estimates", Public Health Service Publication No. 999-AP-26, U.S. Department of Health, Education, and Welfare, Public Health Service, Consumer Protection and Environmental Health Service, National Air Pollution Control Administration, Cincinnati, Ohio, Revised 1969.

where:

- X = concentration, gm/meter³.
 Q = source emission rate, gm/sec.
 σ_y = the standard deviation in the cross-wind direction of the plume concentration distribution, meters.
 L = height of the mixing layer, meters.
 u = wind speed, meters/sec.

The values of the meteorological parameters must be based on the meteorological conditions in the vicinity of the source. Multiplying the estimated maximum 1-hour concentration by 0.25 may be used to estimate a maximum 24-hour concentration. This factor is deemed appropriate for the meteorological conditions to which the above

equation applies. The factor implies that the meteorological conditions persist 6 hours of a 24-hour period. During the remaining 18 hours, wind direction and other meteorological parameters are such that the source has no impact upon the location subjected to contamination during the 6-hour period. The estimated maximum 24-hour concentration may be compared to the maximum 24-hour national standards. This procedure may be used in Priority 1A regions to estimate the existing air quality levels for developing a control strategy.

Under certain source and meteorological conditions, the above equation may not be appropriate; however, other equations² are available that may be used.

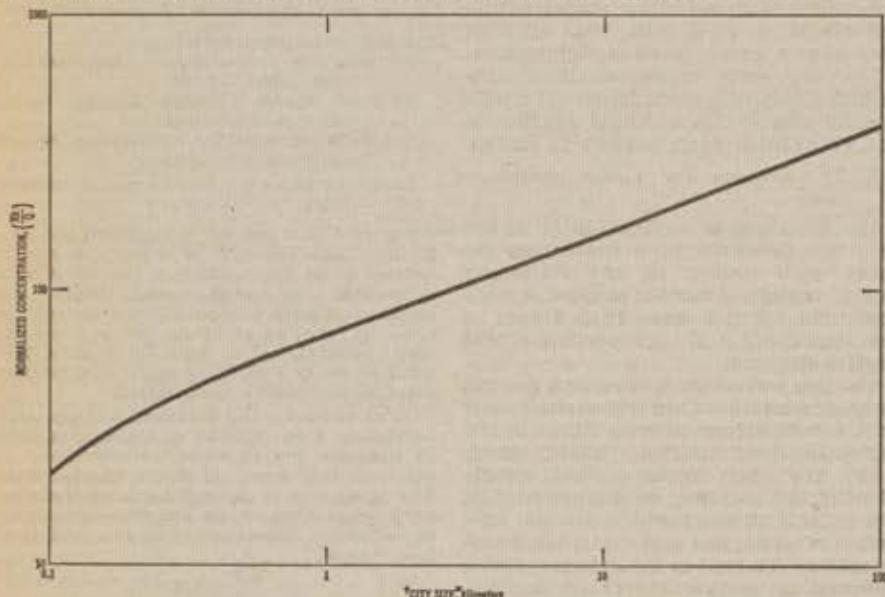


Figure 1. Relationship of normalized pollutant concentration and city size.

APPENDIX B—EXAMPLES OF EMISSION LIMITATIONS ATTAINABLE WITH REASONABLY AVAILABLE TECHNOLOGY

This appendix sets forth emission limitations which, in the Administrator's judgment, are attainable through the application of reasonable available emission control technology. The statements presented herein are not intended, and should not be construed, to require or encourage State agencies to adopt such emission limitations without consideration of (1) the necessity of imposing such emission limitations in order to attain and maintain a national standard, (2) the social and economic impact of such emission limitations, and (3) alternative means of providing for attainment and maintenance of a national standard. Failure of a State agency to adopt any or all of the emission limitations set forth herein will not be grounds for rejecting a State implementation plan if that implementation plan provides for attainment and maintenance of the National Ambient Air Quality Standards within the time prescribed by the Clean Air Act. Nor will State adoption of any or all of these emission limitations be grounds for approval of an implementation plan that does not provide for timely attainment and maintenance of the national standards. In preparing implementation plans, State agencies should tailor their control strategies to deal with the particular problems and meet the particular needs of their own States.

1.0 DEFINITIONS

"Air pollutant" means dust, fumes, mist, smoke, other particulate matter, vapor, gas, odorous substances, or any combination thereof.

"Effluent water separator" means any tank, box, sump, or other container in which any volatile organic compound floating on or entrained or contained in water entering such tank, box, sump, or other container is physically separated and removed from such water prior to outfall, drainage, or recovery of such water.

"Emission" means the act of releasing or discharging air pollutants into the ambient air from any source.

"Fuel-burning equipment" means any furnace, boiler, apparatus, stack, and all appurtenances thereto, used in the process of burning fuel for the primary purpose of producing heat or power by indirect heat transfer.

"Fugitive dust" means solid, airborne particulate matter emitted from any source other than through a stack.

"Opacity" means a state which renders material partially or wholly impervious to rays of light and causes obstruction of an observer's view.

"Particulate matter" means any material, except water in uncombined form, that is or has been airborne and exists as a liquid or a solid at standard conditions.

"Ringelmann chart" means the chart published and described in the U.S. Bureau of Mines Information Circular 8333.

"Source" means any property, real or personal, which emits or may emit any air pollutant.

"Stack" means any chimney, flue, conduit, or duct arranged to conduct emissions to the ambient air.

"Standard conditions" mean a dry gas temperature of 70° Fahrenheit and a gas pressure of 14.7 pounds per square inch absolute.

"Submerged fill pipe" means any fill pipe the discharge opening of which is entirely submerged when the liquid level is 6 inches (15 cm.) above the bottom of the tank; or when applied to a tank which is loaded from the side, means any fill pipe the discharge opening of which is entirely submerged when the liquid level is 18 inches (45 cm.) above the bottom of the tank.

"Volatile organic compounds" means any compound containing carbon and hydrogen or containing carbon and hydrogen in combination with any other element which has a vapor pressure of 1.5 pounds per square inch absolute (77.6 mm. Hg) or greater under actual storage conditions.

2.0 CONTROL OF PARTICULATE EMISSIONS

2.1 Visible emissions. The emission of visible air pollutants can be limited to a shade or density equal to but not darker than that designated as No. 1 on the Ringelmann chart or 20 percent opacity except for brief periods during such operations as soot blowing and startup. This limitation would generally eliminate visible pollutant emissions from stationary sources.

The emission of visible air pollutants from gasoline-powered motor vehicles can be eliminated except for periods not exceeding 5 consecutive seconds. The emission of visible air pollutants from diesel-powered motor vehicles can be limited to a shade or density equal to but not darker than that designated as No. 1 on the Ringelmann chart or 20 percent opacity except for periods not exceeding 5 consecutive seconds.

2.2 Fugitive dust. Reasonable precautions can be taken to prevent particulate matter from becoming airborne. Some of these reasonable precautions include the following:

(a) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land;

(b) Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts;

(c) Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials. Adequate containment methods can be employed during sandblasting or other similar operations;

(d) Covering, at all times when in motion, open bodied trucks, transporting materials likely to give rise to airborne dusts;

(e) Conduct of agricultural practices such as tilling of land, application of fertilizers, etc., in such manner as to prevent dust from becoming airborne;

(f) The paving of roadways and their maintenance in a clean condition;

(g) The prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or other means.

2.3 Incineration. The emission of particulate matter from any incinerator can be limited to 0.20 pound per 100 pounds (2 gm/kg.) of refuse charged. This emission limitation is based on the source test method for stationary sources of particulate emissions which will be published by the Administrator. This method includes both a dry filter and wet impingers and represents particulate matter of 70° F. and 1.0 atmosphere pressure.

2.4 Fuel burning equipment. The emission of particulate matter from fuel burning equipment burning solid fuel can be limited to 0.30 pound per million B.t.u. (0.54 gm/10⁶ gm-cal) of heat input. This emission limitation is based on the source test method for stationary sources of particulate emissions which will be published by the Administrator. This method includes both a dry filter and wet impingers and represents particulate matter of 70° F. and 1.0 atmosphere pressure.

2.5 *Process industries—general.* The emission of particulate matter for any process source can be limited in a manner such as in table I. Process weight per hour means the total weight of all materials introduced into any specific process that may cause any emission of particulate matter. Solid fuels charged are considered as part of the process weight, but liquid and gaseous fuels and combustion air are not. For a cyclical or batch operation, the process weight per hour is derived by dividing the total process weight by the number of hours in one complete operation from the beginning of any given process to the completion thereof, excluding any time during which the equipment is idle. For a continuous operation, the process weight per hour is derived by dividing the process weight for a typical period of time.

TABLE I

Process weight rate (lbs./hr.)	Emission rate (lbs./hr.)
50	0.36
100	0.55
500	1.53
1,000	2.25
5,000	6.34
10,000	9.73
20,000	14.99
60,000	29.60
80,000	31.19
120,000	33.28
160,000	34.85
200,000	36.11
400,000	40.35
1,000,000	46.72

Interpolation of the data in table I for the process weight rates up to 80,000 lbs./hr. shall be accomplished by the use of the equation:

$$E = 3.59 P^{0.63} \quad P \leq 30 \text{ tons/hr.}$$

and interpolation and extrapolation of the data for process weight rates in excess of 60,000 lbs./hr. shall be accomplished by use of the equation:

$$E = 17.31 P^{0.18} \quad P > 30 \text{ tons/hr.}$$

Where: E = Emissions in pounds per hour.

P = Process weight rate in tons per hour.

Application of mass emission limitations on the basis of all similar units at a plant is recommended in order to avoid unequal application of this type of limitation to plants with the same total emission potential but different size units.

3.0 CONTROL OF SULFUR COMPOUND EMISSIONS

3.1 *Fuel combustion.* It is not possible to make nationally applicable generalizations about attainable degrees of control of sulfur oxides emissions from combustion sources. Availability of low-sulfur fuels varies from one area to another. In some areas, severe restrictions on the sulfur content of fuels could have a significant impact on fuel-supply patterns; accordingly, where such restrictions are necessary for attainment of national ambient air quality standards, adoption of phased schedules of sulfur-in-fuel limitations is recommended. Stack gas cleaning is feasible at large industrial combustion sources and steam electric power plants. Technology has been demonstrated which will allow 70 percent removal of sulfur oxides from combustion gases of most existing fuel burning units.

Alternative means of meeting requirements for the control of sulfur oxides emissions from fuel combustion sources include: Use of natural gas, distillate oil, low-sulfur coal, and low-sulfur residual oil; desulfurization of oil or coal; stack gas desulfurization; and restricted use, shutdown, or relocation of large existing sources.

It is technically feasible to produce or desulfurize fuels to meet the following specifications: Distillate oil—0.1 percent sulfur

(though it should be noted that distillate oil containing less than 0.2 percent sulfur is not generally available at this time); residual oil—0.3 percent sulfur; bituminous coal—0.7 percent sulfur. Availability of significant quantities of such low-sulfur fuels in any region where they do not naturally occur or have not been imported from other domestic or foreign sources will require planning for the timely development of new sources of such fuels. Because residual oil generally is obtained from overseas sources, its use ordinarily is restricted to areas accessible to waterborne transportation. There are limited tonnages of 0.7 percent sulfur coal produced at the present time, primarily in the western United States; large reserves of such coal exist but are not now being mined.

The flaring or combustion of any refinery process gas stream or any other process gas stream that contains sulfur compounds measured as hydrogen sulfide can be limited to a concentration of 10 grains per 100 standard cubic feet (23 gm/100scm) of gas. This limitation on combustion of process gas relates to the control of sulfur oxide emissions that would result from burning untreated process gas from refinery operations or coke ovens containing hydrogen sulfide and other sulfur compounds. Hydrogen sulfide emissions can be controlled by requiring incineration or other equally effective means for all process units. Approximately 95 to 99 percent of the sulfur compounds must be removed from the process gas stream to meet this emission limitation. It may be appropriate to consider exemption of very small units which economically may not be able to achieve this level of control.

3.2 *Sulfuric acid plants.* The emissions of sulfur dioxide from sulfuric acid plants can be limited to 6.5 pounds per ton (3.25 kg./metric ton) of 100 percent acid produced. This emission limitation is equivalent to an overall SO_2 to SO_3 conversion efficiency of 99.5 percent or a stack gas concentration of about 250 to 550 p.p.m. of sulfur dioxide, by volume, depending on the strength of the feed gas.

3.3 *Sulfur recovery plants.* The emission of sulfur oxides, calculated as sulfur dioxide, from a sulfur recovery plant can be limited to 0.01 pound (kg.) per pound (kg.) of sulfur processed. Approximately 99.5 percent of the sulfur processed must be recovered to meet this limitation. Existing plants typically recover 90 to 97 percent of the sulfur. This emission limitation corresponds to a sulfur dioxide concentration of about 1,300 p.p.m., by volume.

3.4 *Nonferrous smelters.* Technology is available to limit emission of sulfur oxides, calculated as sulfur dioxide, from primary nonferrous smelters according to the following equations:

$$\text{Copper smelters: } Y = 0.2X.$$

$$\text{Zinc smelters: } Y = 0.564X^{0.86}.$$

$$\text{Lead smelters: } Y = 0.98X^{0.77}.$$

Where:

$$X = \text{Total sulfur fed to smelter (lb./hr.)}$$

$$Y = \text{Sulfur Dioxide Emissions (lb./hr.)}$$

These emission limitations are equivalent to removal of about 90 percent of the input-sulfur to the smelter for most copper smelters and somewhat higher for most lead and zinc smelters. Technology capable of achieving such emission limitations may not be applicable to all existing smelters. In such cases, less restrictive control can be coupled with restricted operations to achieve air quality standards.

3.5 *Sulfite pulp mills.* The total sulfite pulp mill emissions of sulfur oxides, calculated as sulfur dioxide, from blow pits, washer vents, storage tanks, digester relief, and recovery system, can be reduced to 9 pounds per air-dried ton (4.5 kg./metric ton) of pulp produced. This emission limitation has application only to those sulfite mills that install waste liquor recovery systems for water pollu-

tion control or other purposes. The installation of a recovery system can result in significant sulfur oxides emissions if not properly designed. For sulfite mills with existing recovery systems, a sulfur oxides emission limitation of 20 pounds per air-dried ton (9 kg./metric ton) of pulp may be more reasonable due to economic considerations.

4.0 CONTROL OF ORGANIC COMPOUND EMISSIONS

The following emission limitations are applicable to the principal stationary source of organic compound emissions. Reducing total organic compound emissions will reduce photochemical oxidant formation. Such control of organic compound emissions may appropriately be considered in areas where application of the Federal motor vehicle emission standards will not produce the emission reductions necessary for attainment and maintenance of the national ambient air quality standards for photochemical oxidants. These emission limitations emphasize reduction of total organic compound emissions, rather than substitution of "non-reactive" or "less reactive" organic compounds for those already in use, because there is evidence that very few organic compounds are photochemically nonreactive. Substitution may be useful, however, where it would result in a clearly evident decrease in reactivity and thus tend to reduce photochemical oxidant formation. The extent to which application of these emission limitations would reduce photochemical oxidant formation in a given air quality control region will depend on the "mix" of emission sources in the region. These limitations are separable, i.e., one or more portions can be considered, as necessary.

4.1 *Storage of volatile organic compounds.* The storage of volatile organic compounds in any stationary tank, reservoir or other container of more than 40,000 gallons (150,000 liters) can be in a pressure tank capable of maintaining working pressures sufficient at all times to prevent vapor or gas loss to the atmosphere. If this cannot be done, the tank can be equipped with a vapor loss control device such as:

(a) A floating roof, consisting of a pontoon type, double deck type roof or internal floating cover, which will rest on the surface of the liquid contents and be equipped with a closure seal or seals to close the space between the roof edge and tank wall. This control equipment may not be appropriate if the volatile organic compounds have a vapor pressure of 11 pounds per square inch absolute (568 mm. Hg) or greater under actual storage conditions. All tank gauging or sampling devices can be gas-tight except when tank gauging or sampling is taking place.

(b) A vapor recovery system, consisting of a vapor gathering system capable of collecting the volatile organic compound vapors and gases discharged, and a vapor disposal system capable of processing such volatile organic vapors and gases so as to prevent their emission to the atmosphere and all tank gauging and sampling devices can be gas-tight except when gauging or sampling is taking place.

The storage of any volatile organic compound in any stationary storage vessel more than 250-gallon (950 liter) capacity can be in a vessel equipped with a permanent submerged fill pipe or fitted with a vapor recovery system. This emission limitation will reduce volatile organic emissions 90 to 100 percent from uncontrolled sources of storage in vessels 40,000 gallon capacity or greater and approximately 40 percent from uncontrolled sources of storage in vessels 250 gallon capacity or greater.

4.2 *Volatile organic compounds loading facilities.* The loading of volatile organic compounds into any tank, truck, or trailer having a capacity in excess of 200 gallons (760

liters) can be from a loading facility equipped with a vapor collection and disposal system. Also, the loading facility can be equipped with a loading arm with a vapor collection adaptor, pneumatic, hydraulic or other mechanical means to force a vapor-tight seal between the adaptor and the hatch. A means can be provided to prevent drainage of liquid organic compounds from the loading device when it is removed from the hatch of any tank, truck, or trailer, or to accomplish complete drainage before the removal. When loading is effected through means other than hatches, all loading and vapor lines can be equipped with fittings which make vapor-tight connections and which close automatically when disconnected. This emission limitation will result in 55 to 60 percent reduction in volatile organic emissions from uncontrolled sources in gasoline marketing and other organic transfer operations.

4.3 *Volatile organic compounds water separation.* Single or multiple compartment volatile organic compounds water separators which receive effluent water containing 200 gallons (760 liters) a day or more of any volatile organic compound from any equipment processing, refining, treating, storing or handling volatile organic compounds having a Reid vapor pressure of 0.5 pound or greater can be equipped with one of the following vapor loss control devices, properly installed in good working order and in operation:

(a) A container having all openings sealed and totally enclosing the liquid contents. All gauging and sampling devices can be gas-tight except when gauging or sampling is taking place.

(b) A container equipped with a floating roof, consisting of a pontoon type, double deck type roof, or internal floating cover, which will rest on the surface of the contents and be equipped with a closure seal or seals to close the space between the roof edge and container wall. All gauging and sampling devices can be gas-tight except when gauging or sampling is taking place.

(c) A container equipped with a vapor recovery system consisting of a vapor gathering system capable of collecting the organic vapors and gases discharged and a vapor disposal system capable of processing such organic vapors and gases so as to prevent their emission to the atmosphere and with all container gauging and sampling devices gas-tight except when gauging or sampling is taking place. This emission limitation will reduce organic compound emissions from uncontrolled waste water separator units approximately 95 to 100 percent.

4.4 *Pumps and compressors.* All pumps and compressors handling volatile organic compounds can be equipped with mechanical seals or other equipment of equal efficiency.

4.5 *Waste gas disposal.* Any waste gas stream containing organic compounds from any ethylene producing plant or other ethylene emission source can be burned at 1,300° F. (704° C.) for 0.3 second or greater in a direct-flame afterburner or an equally effective device. This does not apply to emergency reliefs and vapor blowdown systems. The emission of organic compounds from a vapor blowdown system or emergency relief can be burned by smokeless flares, or an equally effective control device. This emission limitation will reduce organic compound emissions approximately 98 percent.

4.6 *Organic solvents.* The emission of organic compounds of more than 3 pounds (1.3 kg.) per hour or 15 pounds (6.8 kg.) per day from any equipment can be reduced by at least 85 percent. This can be accomplished by:

(a) Incineration, provided that 90 percent or more of the carbon in the organic compounds being incinerated is oxidized to carbon dioxide, or

(b) Carbon adsorption.

This limitation can be applied to a variety of solvent users including industrial surface coatings, dry cleaning, degreasing and printing operations. Surface coating operations may appropriately be exempted from this limitation when the coating's solvent make-up is water-based and does not exceed 20 percent of organic compounds by volume. Organic solvents which have been shown to be virtually unreactive in the formation of oxidants, e.g., saturated halogenated hydrocarbons, perchlorethylene, benzene, acetone, and C₁-C₈ n-paraffins also may be considered for exemption. Other compounds which have been shown to have low reactivity include cyclohexanone, ethyl acetate, diethylamine, isobutyl acetate, isopropyl alcohol, methyl benzoate, 2-nitropropane, phenyl acetate and triethylamine. This emission limitation may impose an economic burden upon some paint spray booth installations. If such sources are not major contributors to hydrocarbon pollution levels, they may appropriately be considered for exemption.

4.7 *Architectural coatings for buildings.* The emission of organic compounds from architectural coatings can be reduced by requiring the use of water-base or other coatings having an organic solvent content of less than 20 percent by volume. The effectiveness of the limitations set forth in §§ 4.6 and 4.7 will vary, depending on the nature and amounts of emissions in an area; a rough estimate based on Los Angeles emission data indicates that application of the limitation would result in a 70 percent reduction in organic solvent emissions. In estimating the effectiveness, it should be assumed that all organic emissions are reactive; use of exempt solvents as substitutes for regulated solvents may be considered 100 percent effective in reducing reactive organic solvent emissions.

5.0 CONTROL OF CARBON MONOXIDE EMISSIONS

The emissions of carbon monoxide can be limited by requiring complete secondary combustion of waste gas generated in such operations as a grey iron cupola, blast furnace, basic oxygen steel furnace, catalyst regeneration of a petroleum cracking system, petroleum fluid coker or other petroleum process.

6.0 CONTROL OF NITROGEN OXIDES EMISSIONS

6.1 *Fuel burning equipment.* The emission of nitrogen oxides, calculated as nitrogen dioxide, from gas-fired fuel burning equipment can be limited to 0.2 pound per million B.t.u. (0.36 gm/10⁶ gm-cal) of heat input. This emission limitation is about equivalent to a nitrogen dioxide concentration of 175 p.p.m., by volume, on a dry basis at 3 percent oxygen and represents about a 50 percent reduction in nitrogen oxide emissions from uncontrolled gas-fired equipment.

The emission of nitrogen oxides, calculated as nitrogen dioxide, from oil-fired fuel burning equipment can be limited to 0.30 pound per million B.t.u. (0.54 gm/10⁶ gm-cal) of heat input. This emission limitation is about equivalent to a nitrogen dioxide concentration of 230 p.p.m., by volume, on a dry basis, at 3 percent oxygen and represents about a 50 percent reduction in nitrogen oxide emissions from uncontrolled oil-fired fuel burning equipment.

6.2 *Nitric acid manufacture.* The emission of nitrogen oxides, calculated as nitrogen dioxide, from nitric acid manufacturing plants can be limited to 5.5 pounds per ton (2.8 kg./metric ton) of 100 percent acid produced. This emission limitation is about equivalent to a nitrogen dioxide concentration of 400 p.p.m., by volume.

APPENDIX C—MAJOR POLLUTANT SOURCES CHEMICAL PROCESS INDUSTRIES

Adipic acid.
Ammonia.

Ammonium nitrate.
Carbon black.¹
Charcoal.¹
Chlorine.
Detergent and soap.¹
Explosives (TNT and nitrocellulose).¹
Hydrofluoric acid.¹
Nitric acid.
Paint and varnish manufacturing.¹
Phosphoric acid.¹
Phthalic anhydride.
Plastics manufacturing.¹
Printing ink manufacturing.¹
Sodium carbonate.¹
Sulfuric acid.¹
Synthetic fibers.
Synthetic rubber.
Terephthalic acid.

FOOD AND AGRICULTURAL INDUSTRIES

Alfalfa dehydrating.¹
Ammonium nitrate.
Coffee roasting.¹
Cotton ginning.¹
Feed and grain.¹
Fermentation processes.
Fertilizers.¹
Fish meal processing.
Meat smoke houses.¹
Starch manufacturing.¹
Sugar cane processing.¹

METALLURGICAL INDUSTRIES

Primary metals industries:
Aluminum ore reduction.¹
Copper smelters.¹
Ferroalloy production.¹
Iron and steel mills.¹
Lead smelters.¹
Metallurgical coke manufacturing.¹
Zinc.¹
Secondary metals industries:
Aluminum operations.¹
Brass and bronze smelting.¹
Ferroalloys.¹
Gray iron foundries.¹
Lead smelting.¹
Magnesium smelting.¹
Steel foundries.¹
Zinc processes.¹

MINERAL PRODUCTS INDUSTRIES

Asphalt roofing.¹
Asphaltic concrete batching.¹
Bricks and related clay refractories.¹
Calcium carbide.¹
Castable refractories.¹
Cement.¹
Ceramic and clay processes.¹
Clay and fly ash sintering.¹
Coal cleaning.¹
Concrete batching.¹
Fiberglass manufacturing.¹
Frit manufacturing.¹
Glass manufacturing.¹
Gypsum manufacturing.¹
Lime manufacturing.¹
Mineral wool manufacturing.¹
Paperboard manufacturing.¹
Perlite manufacturing.¹
Phosphate rock preparation.¹
Rock, gravel, and sand quarrying and processing.¹

PETROLEUM REFINING AND PETROCHEMICAL OPERATIONS¹

WOOD PROCESSING¹

PETROLEUM STORAGE (Storage tanks and bulk terminals)

MISCELLANEOUS

Fossil fuel steam electric powerplants.¹
Municipal or equivalent incinerators.¹
Open burning dumps.¹

¹Major sources of sulfur oxides and/or particulate matter.

APPENDIX D—(POLLUTANT) EMISSIONS INVENTORY SUMMARY, TONS/YR. (OR METRIC TONS/YR.) (EXAMPLE REGIONS AND WHERE EMISSION LIMITATIONS ARE DEVELOPED)—Continued

APPENDIX D—(POLLUTANT) EMISSIONS INVENTORY SUMMARY, TONS/YR. (OR METRIC TONS/YR.) (EXAMPLE REGIONS AND WHERE EMISSION LIMITATIONS ARE DEVELOPED)—Continued

AIR QUALITY CONTROL REGION
DATA REPRESENTATIVE OF CALENDAR YEAR ...

Source category	State A			State B ¹		
	County		State region total	County		State region total
	i	ii		i	ii	
I. Fuel combustion—stationary sources—Continued	ii	iii	iv	v	vi	vii
C. Industrial fuel—Continued	ii	iii	iv	v	vi	vii
6. Natural gas:	ii	iii	iv	v	vi	vii
a. Area sources	ii	iii	iv	v	vi	vii
b. Point sources	ii	iii	iv	v	vi	vii
7. Process gas:	ii	iii	iv	v	vi	vii
a. Area sources	ii	iii	iv	v	vi	vii
b. Point sources	ii	iii	iv	v	vi	vii
8. Other (specify):	ii	iii	iv	v	vi	vii
a. Area sources	ii	iii	iv	v	vi	vii
b. Point sources	ii	iii	iv	v	vi	vii
9. Total:	ii	iii	iv	v	vi	vii
D. Steam-electric power plant fuel (point sources only):	ii	iii	iv	v	vi	vii
1. Anthracite coal	ii	iii	iv	v	vi	vii
2. Bituminous coal	ii	iii	iv	v	vi	vii
3. Coke	ii	iii	iv	v	vi	vii
4. Distillate oil	ii	iii	iv	v	vi	vii
5. Residual oil	ii	iii	iv	v	vi	vii
6. Natural gas	ii	iii	iv	v	vi	vii
7. Process gas	ii	iii	iv	v	vi	vii
8. Other (specify):	ii	iii	iv	v	vi	vii
9. Total:	ii	iii	iv	v	vi	vii
E. Total stationary fuel combustion:	ii	iii	iv	v	vi	vii
II. Process losses:	ii	iii	iv	v	vi	vii
A. Area sources ^{1a} :	ii	iii	iv	v	vi	vii
1. Point sources	ii	iii	iv	v	vi	vii
B. Chemical process industries:	ii	iii	iv	v	vi	vii
1. Food and agricultural industries	ii	iii	iv	v	vi	vii
2. Metallurgical industries	ii	iii	iv	v	vi	vii
3. Mineral products industries	ii	iii	iv	v	vi	vii
4. Petroleum refining and petrochemical operations	ii	iii	iv	v	vi	vii
5. Wood processing	ii	iii	iv	v	vi	vii
6. Petroleum storage	ii	iii	iv	v	vi	vii
C. Total process losses:	ii	iii	iv	v	vi	vii
III. Solid waste disposal:	ii	iii	iv	v	vi	vii
A. Incineration:	ii	iii	iv	v	vi	vii
1. On-site:	ii	iii	iv	v	vi	vii
a. Area sources	ii	iii	iv	v	vi	vii
b. Point sources	ii	iii	iv	v	vi	vii
2. Municipal, etc.:	ii	iii	iv	v	vi	vii
a. Area sources	ii	iii	iv	v	vi	vii
b. Point sources	ii	iii	iv	v	vi	vii
B. Open burning:	ii	iii	iv	v	vi	vii
1. On-site:	ii	iii	iv	v	vi	vii
a. Area sources	ii	iii	iv	v	vi	vii
b. Point sources	ii	iii	iv	v	vi	vii
2. Damage:	ii	iii	iv	v	vi	vii
a. Area sources	ii	iii	iv	v	vi	vii
b. Point sources	ii	iii	iv	v	vi	vii
C. Other (specify):	ii	iii	iv	v	vi	vii
1. Area sources	ii	iii	iv	v	vi	vii
2. Point sources	ii	iii	iv	v	vi	vii
D. Total solid waste disposal:	ii	iii	iv	v	vi	vii

AIR QUALITY CONTROL REGION
DATA REPRESENTATIVE OF CALENDAR YEAR ...

Source category	State A			State B ¹		
	County		State region total	County		State region total
	i	ii		i	ii	
I. Fuel combustion—stationary sources:	ii	iii	iv	v	vi	vii
A. Residential fuel:	ii	iii	iv	v	vi	vii
1. Anthracite coal:	ii	iii	iv	v	vi	vii
a. Area sources	ii	iii	iv	v	vi	vii
b. Point sources	ii	iii	iv	v	vi	vii
2. Bituminous coal:	ii	iii	iv	v	vi	vii
a. Area sources	ii	iii	iv	v	vi	vii
b. Point sources	ii	iii	iv	v	vi	vii
3. Distillate oil:	ii	iii	iv	v	vi	vii
a. Area sources	ii	iii	iv	v	vi	vii
b. Point sources	ii	iii	iv	v	vi	vii
4. Residual oil:	ii	iii	iv	v	vi	vii
a. Area sources	ii	iii	iv	v	vi	vii
b. Point sources	ii	iii	iv	v	vi	vii
5. Natural gas:	ii	iii	iv	v	vi	vii
a. Area sources	ii	iii	iv	v	vi	vii
b. Point sources	ii	iii	iv	v	vi	vii
6. Wood:	ii	iii	iv	v	vi	vii
a. Area sources	ii	iii	iv	v	vi	vii
b. Point sources	ii	iii	iv	v	vi	vii
7. Other (specify):	ii	iii	iv	v	vi	vii
a. Area sources	ii	iii	iv	v	vi	vii
b. Point sources	ii	iii	iv	v	vi	vii
8. Total:	ii	iii	iv	v	vi	vii
B. Commercial and institutional fuel:	ii	iii	iv	v	vi	vii
1. Anthracite coal:	ii	iii	iv	v	vi	vii
a. Area sources	ii	iii	iv	v	vi	vii
b. Point sources	ii	iii	iv	v	vi	vii
2. Bituminous coal:	ii	iii	iv	v	vi	vii
a. Area sources	ii	iii	iv	v	vi	vii
b. Point sources	ii	iii	iv	v	vi	vii
3. Distillate oil:	ii	iii	iv	v	vi	vii
a. Area sources	ii	iii	iv	v	vi	vii
b. Point sources	ii	iii	iv	v	vi	vii
4. Residual oil:	ii	iii	iv	v	vi	vii
a. Area sources	ii	iii	iv	v	vi	vii
b. Point sources	ii	iii	iv	v	vi	vii
5. Natural Gas:	ii	iii	iv	v	vi	vii
a. Area sources	ii	iii	iv	v	vi	vii
b. Point sources	ii	iii	iv	v	vi	vii
6. Wood:	ii	iii	iv	v	vi	vii
a. Area sources	ii	iii	iv	v	vi	vii
b. Point sources	ii	iii	iv	v	vi	vii
7. Other (specify):	ii	iii	iv	v	vi	vii
a. Area sources	ii	iii	iv	v	vi	vii
b. Point sources	ii	iii	iv	v	vi	vii
8. Total:	ii	iii	iv	v	vi	vii
C. Industrial fuel:	ii	iii	iv	v	vi	vii
1. Anthracite coal:	ii	iii	iv	v	vi	vii
a. Area sources	ii	iii	iv	v	vi	vii
b. Point sources	ii	iii	iv	v	vi	vii
2. Bituminous coal:	ii	iii	iv	v	vi	vii
a. Area sources	ii	iii	iv	v	vi	vii
b. Point sources	ii	iii	iv	v	vi	vii
3. Coke:	ii	iii	iv	v	vi	vii
a. Area sources	ii	iii	iv	v	vi	vii
b. Point sources	ii	iii	iv	v	vi	vii
4. Distillate oil:	ii	iii	iv	v	vi	vii
a. Area sources	ii	iii	iv	v	vi	vii
b. Point sources	ii	iii	iv	v	vi	vii
5. Residual oil:	ii	iii	iv	v	vi	vii
a. Area sources	ii	iii	iv	v	vi	vii
b. Point sources	ii	iii	iv	v	vi	vii

See footnotes at end of table.

APPENDIX D—(POLLUTANT) EMISSIONS INVENTORY SUMMARY, TONS/YR. (EXAMPLE REGIONS AND WHERE EMISSION LIMITATIONS ARE DEVELOPED)—Continued

Source category	State A						State B ¹					
	County 1		County N				State region total		Ditto	Region ¹ total		
	ii	iii	ii	iii	ii	iii	ii	iii		ii	iii	
IV. Transportation (area sources only):												
A. Motor vehicles:												
1. Gasoline powered *												
2. Diesel powered												
B. Off-highway fuel usage												
C. Aircraft												
D. Railroads												
E. Vessels												
F. Gasoline handling evaporative losses [†]												
G. Other (specify)												
H. Total transportation												
V. Miscellaneous (area sources only):												
A. Forest fires												
B. Structural fires												
C. Coal refuse burning												
D. Agricultural burning												
E. Other (specify)												
F. Total miscellaneous												
VI. Grand totals:												
A. Area sources												
B. Point sources												
C. Total												

¹ Included only if interstate region.

ⁱⁱ "Existing Emissions".

ⁱⁱⁱ "Emissions Achieved" with control regulations of implementation plans. Must be submitted in example regions.

^{*} For hydrocarbons only, would include emissions or surface coating operations, dry cleaning, degreasing operations, etc., unless considered point sources.

[†] For hydrocarbons, would include vehicle evaporative losses.

[‡] For hydrocarbons only, would include losses from filling tank trucks, service station tanks, and automobile tanks.

APPENDIX E—POINT SOURCE DATA

(The following information is not required to be submitted with an implementation plan but must be available for inspection by the Administrator, EPA.)

I. GENERAL SOURCE INFORMATION

- Establishment name and address.
- Person to contact on air pollution matters and telephone number.
- Operating schedule:
 - Percent of annual production by season.
 - Days of week normally in operation.
 - Shifts or hours of day normally in operation.
 - Number of days per year in operation.
- Year in which data are recorded.
- Future activities, if available (e.g., addition of new or expansion of existing facilities, changes in production rate, installation of control equipment, phasing out of equipment, fuel change, etc.).
- Map or general layout of large complex plants showing locations of various facilities, if available.¹

II. FUEL COMBUSTION

- Number of boilers.
- Type of fuel burning equipment for each boiler.
- Rated and/or maximum capacity of each boiler, 10⁶ B.t.u./hr. or kcal/hr.
- Types of fuel burned, quantities, and characteristics:
 - Type of each fuel used and place of origin.
 - Maximum and average quantity per hour.
 - Quantity per year.
 - Sulfur content (as received), percent.
 - Ash content (as received), percent.
 - Heat content (as received), B.t.u. or kcal/unit of measure.

- Estimate of future usage, if available.
- Percent used for space heating and process heat.

F. Air pollution control equipment (existing and proposed):

- Type.
- Collection efficiency (design and actual), percent.

G. Stack data:

- List stacks by boilers served.
- Location of stacks by grid coordinates (Universal Transverse Mercator, UTM, or equivalent).¹
- Stack height, feet or meters.
- Stack diameter (inside, top), feet or meters.
- Exit gas temperature, °F. or °C.
- Exit gas velocity, feet/sec. or meters/sec.

H. Emission data:

- Based on emission factors.
- Estimate of emissions by the source.
- Results of any stack tests conducted.

III. MANUFACTURING ACTIVITIES (PROCESS LOSSES)

A. Process name or description of each product.

B. Quantity of raw materials used and handled for each product, maximum quantity per hour, and average quantity per year.

C. Quantity of each product manufactured, maximum quantity per hour, and average quantity per year.

D. Description of annual, seasonal, monthly, weekly, and daily operating cycle including downtime for maintenance and repairs.

E. Air pollution control equipment in use (existing and proposed):

F. Air pollution control equipment in use (existing and proposed):

- Type.
- Collection efficiency (design and actual), percent.

- F. Stack data:
- List of stacks by equipment served.
 - Location of stacks by grid location (UTM or equivalent).¹
 - Stack height, feet or meters.
 - Stack diameter (inside, top), feet or meters.
 - Exit gas temperature, °F. or °C.
 - Exit gas velocity, feet/sec. or meters/sec.
- G. Emission data:
- Based on emission factors.
 - Estimate of emissions by the source.
 - Results of any stack tests conducted.

IV. SOLID WASTE DISPOSAL

A. Amount and description of solid waste generated, quantity per year.

B. Percent of total that is combustible.

C. Method of disposal (on-site or off-site).

D. Description of on-site disposal method, if applicable (incineration, open burning, landfill, etc.) including maximum quantities disposed per hour and average quantities disposed per year and actual operating schedule.

1. Location of the source by a grid system (UTM or equivalent).¹

2. If method of disposal is by an incinerator, include the following information:

- Auxiliary fuel used.
- Air pollution control equipment (existing and proposed):

- Type.
- Collection efficiency (actual and design), percent.

c. Stack data:

- List stacks by furnaces served.
- Stack height, feet or meters.
- Stack diameter (inside, top), feet or meters.
- Exit gas temperature, °F. or °C.
- Exit gas velocity, feet/sec. or meters/sec.

- Exit gas moisture content, percent if available.

3. Emission data:

- Based on emission factors.
- Estimate of emissions by the source.
- Results of any stack tests conducted.

APPENDIX F—AREA SOURCE DATA¹

(The following information is not required to be submitted with an implementation plan but must be available for inspection by the Administrator, EPA)

Grid Coordinate (lower left-hand corner)

----- UTM or equivalent.²

Average Stack Height of sources -----³

I. FUEL COMBUSTION—STATIONARY SOURCES

Includes sulfur and ash content of fuels, if applicable.

A. Residential Fuel:

- Anthracite Coal (plus type and size of unit)⁴—tons/year or metric tons/year.
- Bituminous Coal (plus type and size of unit)—tons/year or metric tons/year.
- Distillate Oil (plus type and size of unit)—10³ gal./year or 10³ liters/year.
- Residual Oil (plus type and size of unit)—10³ gal./year or 10³ liters/year.
- Natural Gas (plus type and size of unit)—10³ cu.-ft./year or 10³ cu.-meters/year.
- Wood—tons/year or metric tons/year.
- Other—please specify.

B. Commercial and Institutional Fuel:

- Anthracite Coal (plus type and size of unit)—tons/year or metric tons/year.
- Bituminous Coal (plus type and size of unit)—tons/year or metric tons/year.
- Distillate Oil (plus type and size of unit)—10³ gal./year or 10³ liters/year.

¹ Required only when diffusion modeling is utilized.

4. Residual Oil (plus type and size of unit)—10³ gal./year or 10³ liters/year.
5. Natural Gas (plus type and size of unit)—10³ cu.-ft./year or 10³ cu.-meters/year.
6. Wood—tons/year or metric tons/year.
7. Other—please specify.
- C. Industrial Fuel:
 1. Anthracite Coal (plus type and size of unit)—tons/year or metric tons/year.
 2. Bituminous coal (plus type and size of unit)—tons/year or metric tons/year.
 3. Coke (plus type and size of unit)—tons/year or metric tons/year.
 4. Distillate Oil (plus type and size of unit)—10³ gal./year or 10³ liters/year.
 5. Residual Oil (plus type and size of unit)—10³ gal./year or 10³ liters/year.
 6. Natural Gas (plus type and size of unit)—10³ cu.-ft./year or 10³ cu.-meters/year.
 7. Wood—tons/year or metric tons/year.
 8. Other—please specify.

II. PROCESS LOSSES (HYDROCARBONS ONLY)

- A. Surface coating operations, dry cleaning, degreasing operations, etc., unless considered as point sources—appropriate basis for emission estimate.

III. SOLID WASTE DISPOSAL

- A. On-site incineration (plus type of unit)—tons/year or metric tons/year.
- B. Open burning—tons/year or metric tons/year.
- C. Other—please specify.

IV. TRANSPORTATION

- A. Gasoline-powered motor vehicles—appropriate basis for emission estimate, including hydrocarbon evaporative losses.
- B. Diesel-powered motor vehicles—appropriate basis for emission estimate.
- C. Off-highway fuel usage—10³ gal./year or 10³ liters/year.

D. Aircraft—number of flights per year per type of aircraft.

E. Railroads—10³ gal. diesel oil/year or 10³ liters/year.

F. Vessels—10³ gal. or 10³ liters of oil/year, tons or metric tons of coal/year, or tons or metric tons of wood/year.

G. Gasoline handling evaporative losses—appropriate basis for hydrocarbon emission estimate from filling tank trucks, service station tanks, and automobile tanks.

H. Other—please specify

V. MISCELLANEOUS

A. Forest fires—appropriate basis for emission estimate.

B. Structural fires—appropriate basis for emission estimate.

C. Coal refuse burning—appropriate basis for emission estimate.

D. Agricultural burning—appropriate basis for emission estimate.

E. Other—please specify.

APPENDIX G—(POLLUTANT) EMISSIONS INVENTORY SUMMARY, TONS/YR. (OR METRIC TONS/YR.) (REGIONS WHERE EMISSION LIMITATIONS ARE NOT DEVELOPED)

..... AIR QUALITY CONTROL REGION
DATA REPRESENTATIVE OF CALENDAR YEAR

Source category	State A			State B ¹		
	County 1	County N	State region total	Ditto	Regional ¹ total
	"	"	"	"	Ditto	"
I. Fuel combustion—Stationary sources:						
A. Area sources ⁱⁱⁱ						
B. Point sources.....						
C. Total.....						
II. Process losses:						
A. Area sources ^{iii, iv}						
B. Point sources.....						
1. Chemical process industries.....						
2. Food and agricultural industries.....						
3. Metallurgical industries.....						
4. Mineral products industries.....						
5. Petroleum refining and petrochemical operations.....						
6. Wood processing.....						
7. Petroleum storage.....						
C. Total.....						
III. Solid waste disposal:						
A. Area sources ⁱⁱⁱ						
B. Point sources.....						
C. Total.....						
IV. Transportation: (Area Sources only) ^{iii, v}						
V. Miscellaneous: (Area Sources only) ⁱⁱⁱ						
VI. Grand totals:						
A. Area sources ⁱⁱⁱ						
B. Point sources.....						
C. Total.....						

¹ Included only if interstate region.

ⁱⁱ Existing Emissions.

ⁱⁱⁱ If not available, does not need to be submitted for Priority III regions.

^{iv} For hydrocarbons only, would include emissions for surface coating operations, dry cleaning, degreasing operations, etc., unless considered point sources.

^v For hydrocarbons would include vehicle evaporative losses and losses from filling trucks, service station tanks, and automobile tanks.

APPENDIX H—AIR QUALITY DATA SUMMARY

Pollutant	Sampling site location ¹	Sampling interval (months)	Start date	End date	Number of samples	Maximum 1-hour	Maximum 8 hours	Maximum 24 hours	Annual arith. mean	Annual geo. mean	Geo. std. dev.
Particulate matter.....	X	X	X	X	X	-----	-----	X	-----	X	X
Sulfur oxides (as SO ₂).....	X	X	X	X	X	-----	-----	X	X	-----	X
Nitrogen dioxide.....	X	X	X	X	X	-----	-----	-----	-----	-----	-----
Photo-chemical oxidants.....	X	X	X	X	X	-----	-----	-----	-----	-----	-----
Carbon monoxide.....	X	X	X	X	X	X	X	-----	-----	-----	-----

X = Date or information required.

¹ UTM Grid coordinate or equivalent.

See footnotes on the following page.

APPENDIX I—PROJECTED MOTOR VEHICLE EMISSIONS

The assumptions listed below were made in calculating the projected national urban emissions from motor vehicles as shown in Figures 1-3.

a. Emission factors are based on the new Federal test procedure (1), which has an average route speed of 18 miles per hour (29 kilometers per hour).

b. Emission control devices are assumed to just meet present and proposed standards when new, but deteriorate with age. Deterioration factors are adapted from data given in Reference 2.

c. Urban vehicle-mile projections adapted from Reference 3.

d. Distribution of automobiles by age from Reference 4.

e. Relative miles of travel for automobiles (i.e., new cars are driven more than older ones) from Reference 5.

Figures 1-3 can be used to approximate air quality levels resulting from the Federal Motor Vehicle Control Program. The following equation calculates the expected air quality concentration for any given year:

$$A.Q._t = A.Q._0 \left[\frac{E_t}{E_0} F + (1-F)(GF) \right]$$

where:

Subscripts 0 and 1 denote the base year and future year of interest, respectively.

¹ Emissions data for all source categories and subcategories should be summarized in the implementation plans as is in Appendix D or G.

² Data is required on a grid basis only when diffusion modeling is utilized. For proportional model technique, data must be available on a county basis.

³ Required only when diffusion modeling is utilized.

⁴ Average type and size for each category. This is used as the basis for selection of average emission factor.

A.Q. = Air quality (measured or estimated) in region.
E = Normalized emissions from Figures 1-3.
F = Ratio of motor vehicle emissions to total emissions of each pollutant in region.

GF = Growth factor for emission increases from stationary sources.

This equation can be applied directly for carbon monoxide, nitrogen dioxide (if all nitrogen oxides emissions are assumed to be measured as nitrogen dioxide), and non-methane hydrocarbons (assumes reduction in total hydrocarbon emissions will result in a proportion reduction of measured nonmethane hydrocarbons). The equation cannot directly be applied to determine the reduction in photochemical oxidant levels resulting from reductions in hydrocarbon emissions. The percent reduction in hydrocarbon emissions expected from the Federal Motor Vehicle Control Program can be estimated using that portion of the equation in brackets | |. By using Appendix J, it can be determined if this is sufficient to achieve the national standard for photochemical oxidants and if stationary source and/or transportation controls are required.

REFERENCES

1. FEDERAL REGISTER, Vol. 35, No. 219, Part II, Nov. 10, 1970.
2. "Exhaust Emissions from Privately Owned 1968-1970 California Automobiles—A Statistical Evaluation of Surveillance Data." Supplement to Progress Report No. 22 by Arthur J. Hooker, California Air Resources Board, Los Angeles, Calif., Apr. 19, 1971.
3. Landéberg, H. H., Fischman, L. L., and Fisher, J. L., "Resources in America's Future," Johns Hopkins Press, 1963.
4. "Automotive News—1968 Almanac Issue" Slocum Publishing, Detroit, Mich., Apr. 29, 1969.
5. Boettich, T. A., and Greenbelgh, H. J., "Relationship of Passenger Car Age and other Factors to Miles Driven," U.S. Department of Commerce, Bureau of Public Roads, Washington, D.C., Jan. 1967.

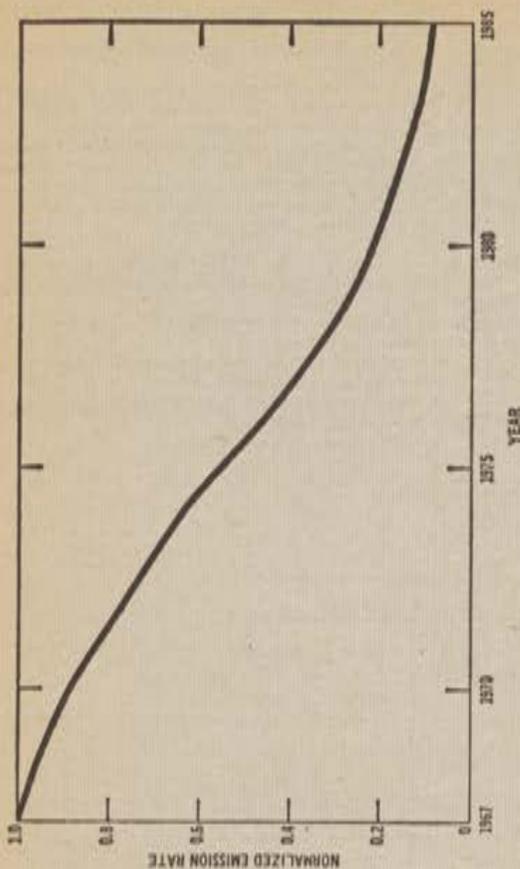


Figure 1. Hydrocarbon emission rates from urban vehicles in United States - projected from 1967 base of 1.

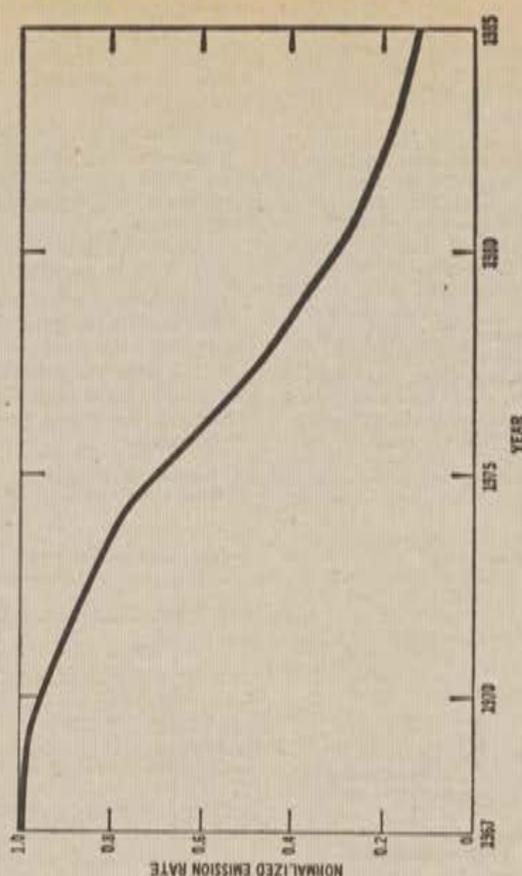


Figure 2. Carbon monoxide emission rates from urban vehicles in United States - projected from 1967 base of 1.

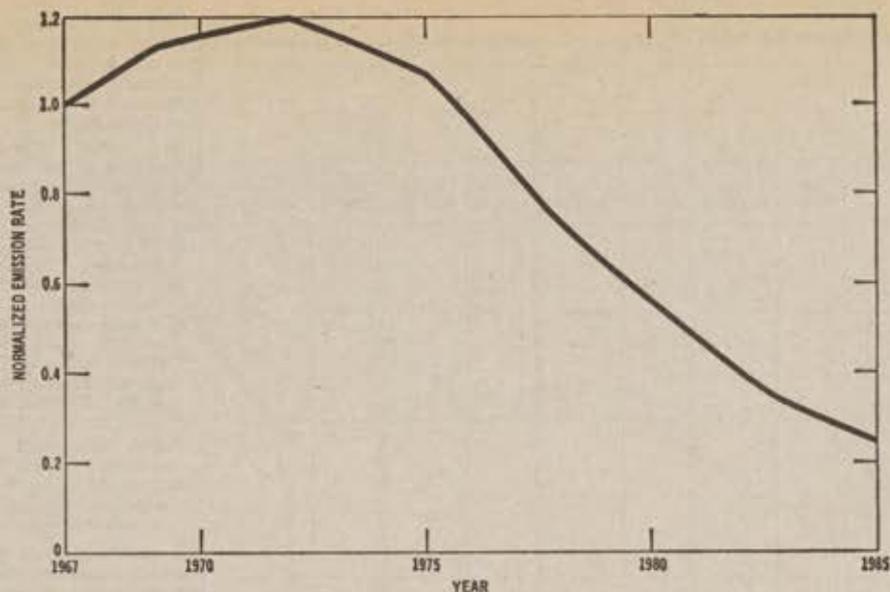


Figure 3. Nitrogen oxide emission rates from urban vehicles in United States - projected from 1967 base of 1.

APPENDIX J

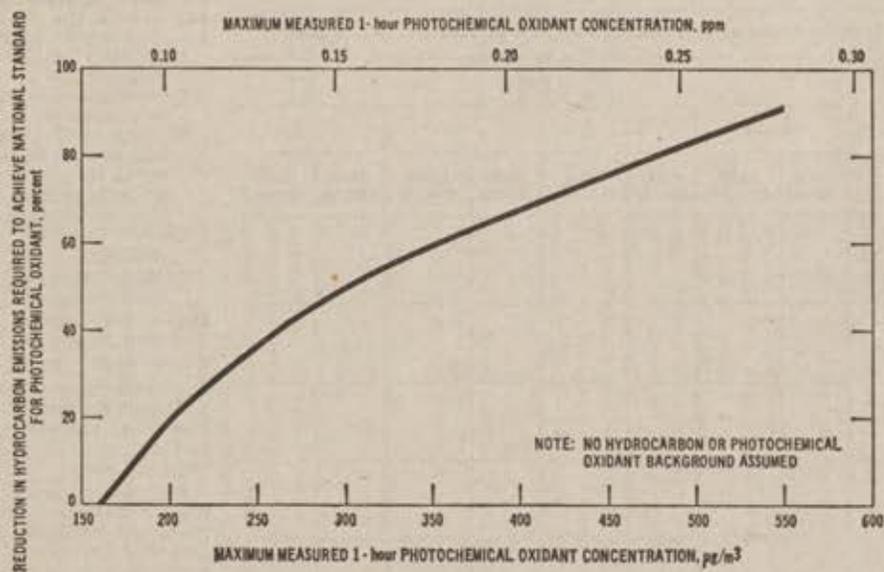


Figure 1. Required hydrocarbon emission control as a function of photochemical oxidant concentration. (Reference: Air Quality Criteria for Nitrogen Oxides, AP-84, Environmental Protection Agency, Washington, D.C., January 1971.)

APPENDIX K—CONTROL AGENCY FUNCTIONS

Man-year estimates by function for State of _____ portion of _____ AQCR.

Function	Year							
	Present							
	State agency	Local agencies	State agency	Local agencies	State agency	Local agencies	State agency	Local agencies
Enforcement services.....								
(Subtotal).....								
Scheduled inspections.....								
Complaints and field patrol.....								
Engineering services.....								
(Subtotal).....								
Permit system.....								
Emission estimates.....								
Source testing.....								
Reports, new legislation, etc.....								
Technical services.....								
(Subtotal).....								
Operation of monitoring network.....								
Special studies.....								
Instrument Calibration and Maintenance.....								
Laboratory operations.....								
Data processing.....								
Management services.....								
(Subtotal).....								
Policy, P/R, Strategies, etc.....								
Staff training.....								
Administrative and clerical support.....								
Totals.....								

Fund estimates by function for State of _____ portion of _____ AQCR.

Function	Year							
	Present							
	State agency	Local agencies	State agency	Local agencies	State agency	Local agencies	State agency	Local agencies
Enforcement services.....								
Operating funds.....								
Capital funds.....								
Contract funds.....								
Engineering services.....								
Operating funds.....								
Capital funds.....								
Contract funds.....								
Technical services.....								
Operating funds.....								
Capital funds.....								
Contract funds.....								
Management services.....								
Operating funds.....								
Capital funds.....								
Contract funds.....								
Total operating funds.....								
Total capital funds.....								
Total contract funds.....								
Total funds.....								

NOTE: Report funds as \$1,000.

APPENDIX L—EXAMPLE REGULATIONS FOR PREVENTION OF AIR POLLUTION EMERGENCY EPISODES

The example regulations presented herein reflect generally recognized ways of preventing air pollution from reaching levels that would cause imminent and substantial endangerment to the health of persons. States are required to have emergency episode plans for Priority I regions, but they are not required to adopt the regulations presented herein.

1.0 Air pollution emergency. This regulation is designed to prevent the excessive buildup of air pollutants during air pollution episodes, thereby preventing the occurrence of an emergency due to the effects of these pollutants on the health of persons.

1.1 Episode criteria. Conditions justifying the proclamation of an air pollution alert, air pollution warning, or air pollution emergency shall be deemed to exist whenever the Director determines that the accumulation of air pollutants in any place is attaining or has attained levels which could, if such levels are sustained or exceeded, lead to a substantial threat to the health of persons. In making this determination, the Director will be guided by the following criteria:

1.1 Episode criteria. Conditions justifying the proclamation of an air pollution alert, air pollution warning, or air pollution emergency shall be deemed to exist whenever the Director determines that the accumulation of air pollutants in any place is attaining or has attained levels which could, if such levels are sustained or exceeded, lead to a substantial threat to the health of persons. In making this determination, the Director will be guided by the following criteria:

(a) "Air Pollution Forecast": An internal watch by the Department of Air Pollution Control shall be actuated by a National Weather Service advisory that Atmospheric Stagnation Advisory is in effect or the equivalent local forecast of stagnant atmospheric condition.

(b) "Alert": The Alert level is that concentration of pollutants at which first stage control actions is to begin. An Alert will be declared when any one of the following levels is reached at any monitoring site:

- SO₂—800 µg/m³ (0.3 p.p.m.), 24-hour average.
- Particulate—3.0 COHs or 375 µg/m³, 24-hour average.
- SO₂ and particulate combined—product of SO₂, p.p.m., 24-hour average, and COHs equal to 0.2 or product of SO₂, µg/m³, 24-hour average, and particulate µg/m³, 24-hour average equal to 65 × 10⁶.
- CO—17 mg./m³ (15 p.p.m.), 8-hour average.
- Oxidant (O₃)—200 µg/m³ (0.1 p.p.m.)—1-hour average.
- NO₂—1130 µg/m³ (0.6 p.p.m.), 1-hour average, 262 µg/m³ (0.15 p.p.m.), 24-hour average.

and meteorological conditions are such the pollutant concentrations can be expected to remain at the above levels for twelve (12) or more hours or increase unless control actions are taken.

(c) "Warning": The warning level indicates that air quality is continuing to degrade and that additional control actions are necessary. A warning will be declared when any one of the following levels is reached at any monitoring site:

- SO₂—1,000 µg/m³ (0.6 p.p.m.), 24-hour average.
- Particulate—6.0 COHs or 750 µg/m³, 24-hour average.
- SO₂ and particulate combined—product of SO₂, p.p.m., 24-hour average and COHs equal to 1.0 or product of SO₂, µg/m³, 24-hour average and particulate µg/m³, 24-hour average equal to 327 × 10⁶.
- CO—34 mg./m³ (30 p.p.m.), 8-hour average.
- Oxidant (O₃)—800 µg/m³ (0.4 p.p.m.), 1-hour average.
- NO₂—2,250 µg/m³ (1.2 p.p.m.)—1-hour average; 555 µg/m³ (0.3 p.p.m.), 24-hour average.

and meteorological conditions are such that pollutant concentrations can be expected to remain at the above levels for twelve (12) or more hours or increase unless control actions are taken.

(d) "Emergency": The emergency level indicates that air quality is continuing to degrade to a level that should never be reached and that the most stringent control actions are necessary. An emergency will be declared when any one of the following levels is reached at any monitoring site:

- SO₂—2,100 µg/m³ (0.8 p.p.m.), 24-hour average.
- Particulate—8.0 COHs or 1,000 µg/m³, 24-hour average.
- SO₂ and particulate combined—product of SO₂, p.p.m., 24-hour average and COHs equal to 2.0 or product of SO₂, µg/m³, 24-hour average and particulate µg/m³, 24-hour average equal to 650 × 10⁶.
- CO—46 mg./m³ (40 p.p.m.), 8-hour average.
- Oxidant (O₃)—1,200 µg/m³ (0.6 p.p.m.), 1-hour average.
- NO₂—3,000 µg/m³ (1.6 p.p.m.), 1-hour average; 750 µg/m³ (0.4 p.p.m.), 24-hour average.

and meteorological conditions are such that this condition can be expected to continue for twelve (12) or more hours.

RULES AND REGULATIONS

TABLE I—ABATEMENT STRATEGIES EMISSION REDUCTION PLANS

ALERT LEVEL

Part A. General

1. There shall be no open burning by any persons of tree waste, vegetation, refuse, or debris in any form.
2. The use of incinerators for the disposal of any form of solid waste shall be limited to the hours between 12 noon and 4 p.m.
3. Persons operating fuel-burning equipment which required boiler lancing or soot blowing shall perform such operations only between the hours of 12 noon and 4 p.m.
4. Persons operating motor vehicles should eliminate all unnecessary operations.

Part B. Source curtailment

Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for this Alert Level.

Control actions

Source of air pollution

- | | |
|--|--|
| <p>1. Coal or oil-fired electric power generating facilities.</p> | <p>a. Substantial reduction by utilization of fuels having low ash and sulfur content.</p> <p>b. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing.</p> <p>c. Substantial reduction by diverting electric power generation to facilities outside of Alert Area.</p> |
| <p>2. Coal and oil-fired process steam generating facilities.</p> | <p>a. Substantial reduction by utilization of fuels having low ash and sulfur content.</p> <p>b. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing.</p> <p>c. Substantial reduction of steam load demands consistent with continuing plant operations.</p> |
| <p>3. Manufacturing industries of the following classifications:
Primary Metals Industry.
Petroleum Refining Operations
Chemical Industries.
Mineral Processing Industries.
Paper and Allied Products.
Grain Industry.</p> | <p>a. Substantial reduction of air pollutants from manufacturing operations by curtailing, postponing, or deferring production and all operations.</p> <p>b. Maximum reduction by deferring trade waste disposal operations which emit solid particles, gas vapors or malodorous substances.</p> <p>c. Maximum reduction of heat load demands for processing.</p> <p>d. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing.</p> |

TABLE II—EMISSION REDUCTION PLANS

WARNING LEVEL

Part A. General

1. There shall be no open burning by any persons of tree waste, vegetation, refuse, or debris in any form.
2. The use of incinerators for the disposal of any form of solid waste or liquid waste shall be prohibited.
3. Persons operating fuel-burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12 noon and 4 p.m.

for reducing the emission of air pollutants during periods of an Air Pollution Alert, Air Pollution Warning, and Air Pollution Emergency. Standby plans shall be designed to reduce or eliminate emissions of air pollutants in accordance with the objectives set forth in Tables I-III which are made a part of this section.

(b) Any person responsible for the operation of a source of air pollutants not set forth under section 1.3(a) shall, when requested by the Director in writing, prepare standby plans for reducing the emission of air pollutants during periods of an Air Pollution Alert, Air Pollution Warning, and Air Pollution Emergency. Standby plans shall be designed to reduce or eliminate emissions of air pollutants in accordance with the objectives set forth in Tables I-III.

(c) Standby plans as required under sections 1.3(a) and 1.3(b) shall be in writing and identify the sources of air pollutants, the approximate amount of reduction of pollutants and a brief description of the manner in which the reduction will be achieved during an Air Pollution Alert, Air Pollution Warning, and Air Pollution Emergency.

(d) During a condition of Air Pollution Alert, Air Pollution Warning, and Air Pollution Emergency, standby plans as required by this section shall be made available on the premises to any person authorized to enforce the provisions of applicable rules and regulations.

(e) Standby plans as required by this section shall be submitted to the Director upon request within thirty (30) days of the receipt of such request; such standby plans shall be subject to review and approval by the Director. If, in the opinion of the Director, a standby plan does not effectively carry out the objectives as set forth in Tables I-III, the Director may disapprove it, state his reason for disapproval and order the preparation of an amended standby plan within the time period specified in the order.

(e) "Termination": Once declared, any status reached by application of these criteria will remain in effect until the criteria for that level are no longer met. At such time, the next lower status will be assumed.

1.2 Emission reduction plans. (a) Air Pollution Alert—When the Director declares an Air Pollution Alert, any person responsible for the operation of a source of air pollutants as set forth in Table I shall take all Air Pollution Alert actions as required for such source of air pollutants and shall put into effect the preplanned abatement strategy for an Air Pollution Alert.

(b) Air Pollution Warning—When the Director declares an Air Pollution Warning, any person responsible for the operation of a source of air pollutants as set forth in Table II shall take all Air Pollution Warning actions as required for such source of air pollutants and shall put into effect the preplanned abatement strategy for an Air Pollution Warning.

(c) Air Pollution Emergency—When the Director declares an Air Pollution Emergency, any person responsible for the operation of a source of air pollutants as described in Table III shall take all Air Pollution Emergency actions as required for such source of air pollutants and shall put into effect the preplanned abatement strategy for an Air Pollution Emergency.

(d) When the Director determines that a specified criteria level has been reached at one or more monitoring sites solely because of emissions from a limited number of sources, he shall notify such source(s) that the preplanned abatement strategies of Tables I, II, and III or the standby plans are required, insofar as it applies to such source(s), and shall be put into effect until the criteria of the specified level are no longer met.

1.3 Preplanned abatement strategies. (a) Any person responsible for the operation of a source of air pollutants as set forth in Tables I-III shall prepare standby plans

4. Persons operating motor vehicles must reduce operations by the use of car pools and increased use of public transportation and elimination of unnecessary operation.

Part B. Source curtailment

Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for this Warning Level.

Source of air pollution

1. Coal or oil-fired electric power generating facilities.

<p><i>Control action</i></p> <ol style="list-style-type: none"> a. Maximum reduction by utilization of fuels having lowest ash and sulfur content. b. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing. c. Maximum reduction by diverting electric power generation to facilities outside of Warning Area. 	<ol style="list-style-type: none"> a. Maximum reduction by utilization of fuels having the lowest available ash and sulfur content. b. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing. c. Making ready for use a plan of action to be taken if an emergency develops.
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2. Oil and oil-fired process steam generating facilities.

<ol style="list-style-type: none"> a. Maximum reduction by utilization of fuels having the lowest available ash and sulfur content. b. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing. c. Making ready for use a plan of action to be taken if an emergency develops. 	<ol style="list-style-type: none"> a. Maximum reduction of air contaminants from manufacturing operations by, if necessary, assuming reasonable economic hardships by postponing production and allied operation. b. Maximum reduction by deferring trade waste disposal operations which emit solid particles, gases, vapors or malodorous substances. c. Maximum reduction of heat load demands for processing. d. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing or soot blowing.
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3. Manufacturing industries which require considerable lead time for shut-down including the following classifications.

<p>Petroleum Refining. Chemical Industries. Primary Metals Industries. Glass Industries. Paper and Allied Products.</p>	<ol style="list-style-type: none"> a. Maximum reduction of air contaminants from manufacturing operations by ceasing, curtailing, postponing or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment. b. Elimination of air pollutants from trade waste disposal processes which emit solid particles, gases, vapors or malodorous substances. c. Maximum reduction of heat load demands for processing. d. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing or soot blowing.
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4. Manufacturing industries require relatively short lead times for shut-down including the following classifications.

<p>Primary Metals Industries. Chemical Industries. Mineral Processing Industries. Grain Industry.</p>	<ol style="list-style-type: none"> a. Elimination of air pollutants from manufacturing operations by ceasing, curtailing, postponing or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment. b. Elimination of air pollutants from trade waste disposal processes which emit solid particles, gases, vapors or malodorous substances. c. Maximum reduction of heat load demands for processing. d. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing or soot blowing.
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TABLE III—EMISSION REDUCTION PLANS

EMERGENCY LEVEL

Part A. General

1. There shall be no open burning by any persons of tree waste, vegetation, refuse, or debris in any form.

2. The use of incinerators for the disposal of any form of solid or liquid waste shall be prohibited.

3. All phases of employment described below shall immediately cease operations.

a. Mining and quarrying of nonmetallic minerals.

b. All construction work except that which must proceed to avoid emergent physical harm.

c. All manufacturing establishments except those required to have in force an air pollution emergency plan.

d. All wholesale trade establishments; i.e., places of business primarily engaged in selling merchandise to retailers, or industrial, commercial, institutional or professional users, or to other wholesalers, or acting as agents in buying merchandise for or selling merchandise to such persons or companies, except those engaged in the distribution of drugs, surgical supplies and food.

e. Establishments rendering amusement and recreational services including motion picture theaters.

f. Elementary and secondary schools, colleges, universities, professional schools, junior colleges, vocational schools, and public and private libraries.

g. All commercial and manufacturing establishments not included in this order will institute such actions as will result in maximum reduction of air pollutants from their operation by ceasing, curtailing, or postponing operations which emit air pollutants to the extent possible without causing injury to persons or damage to equipment.

h. The use of motor vehicles is prohibited except in emergencies with the approval of local or State police.

Part B. Source curtailment

Any person responsible for the operation of a source of air pollutants listed below shall take all required control actions for this Emergency Level.

Source of air pollution

1. Coal or oil-fired electric power generating facilities.

<p><i>Control action</i></p> <ol style="list-style-type: none"> a. Maximum reduction by utilization of fuels having lowest ash and sulfur content. b. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing or soot blowing. c. Maximum reduction by diverting electric power generation to facilities outside of Emergency Area. 	<ol style="list-style-type: none"> a. Maximum reduction by utilization of fuels having lowest ash and sulfur content. b. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing or soot blowing. c. Maximum reduction by diverting electric power generation to facilities outside of Emergency Area.
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e. All offices of local, county and State government including authorities, joint meetings, and other public bodies excepting such agencies which are determined by the chief administrative officer of local, county, or State government, authorities, joint meetings and other public bodies to be vital for public safety and welfare and the enforcement of the provisions of this order.

f. All retail trade establishments except pharmacies, surgical supply distributors, and stores primarily engaged in the sale of food.

g. Banks, credit agencies other than banks, securities and commodities brokers, dealers, exchanges and services; offices of insurance carriers, agents and brokers, real estate offices.

h. Wholesale and retail laundries, laundry services and cleaning and dyeing establishments; photographic studios; beauty shops, barber shops, shoe repair shops.

i. Advertising offices; consumer credit reporting, adjustment and collection agencies; duplicating, addressing, blueprinting, photocopying, mailing, mailing list and stenographic services; equipment rental services, commercial testing laboratories.

j. Automobile repair, automobile services, garages.

- 2. Coal and oil-fired process steam generating facilities.
- 3. Manufacturing industries of the following classifications.
 - Primary Metals Industries.
 - Petroleum Refining.
 - Chemical Industries.
 - Mineral Processing Industries.
 - Grain Industry.
 - Paper and Allied Products.

- a. Maximum reduction by reducing heat and steam demands to absolute necessities consistent with preventing equipment damage.
- b. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing and soot blowing.
- c. Taking the action called for in the emergency plan.
- a. Elimination of air pollutants from manufacturing operations by ceasing, curtailing, postponing or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment.
- b. Elimination of air pollutants from trade waste disposal processes which emit solid particles, gases, vapors or malodorous substances.
- c. Maximum reduction of heat load demands for processing.
- d. Maximum utilization of mid-day (12 noon to 4 p.m.) atmospheric turbulence for boiler lancing or soot blowing.

PART 76—PREVENTION, CONTROL, AND ABATEMENT OF AIR POLLUTION FROM FEDERAL GOVERNMENT ACTIVITIES: PERFORMANCE STANDARDS AND TECHNIQUES OF MEASUREMENT

- Sec.
- 76.1 Definitions.
- 76.2 Intent.
- 76.3 Applicability.
- 76.4 Combustion of fuel.
- 76.5 Sulfur oxides.
- 76.6 Stacks.
- 76.7 Storage and handling of fuels and ash.
- 76.8 Disposal of waste.
- 76.9 Other pollution producing processes.

AUTHORITY: The provisions of this Part 76 issued under Executive Order 11507; Reorg. Plan 3 of 1970; 3 CFR, 1970 Comp.

§ 76.1 Definitions.

- As used in this part:
 - (a) "Executive Order" means Executive Order No. 11507.
 - (b) "Nonurban areas" means all areas other than urban areas.
 - (c) "Ringelmann Scale" means the Ringelmann Scale as published in the latest U.S. Bureau of Mines Information Circular entitled "Ringelmann Smoke Chart".
 - (d) "Administrator" means the Administrator of the Environmental Protection Agency or his authorized representative.
 - (e) "Urban areas" means those areas classified as urban in the latest available Federal census, or as Standard Metropolitan Statistical Areas.
 - (f) "Unit" means all indirect heat exchangers connected to a single stack.
 - (g) "Particulate matter" means any material, except uncombined water, that exists as a solid or liquid at standard conditions.
 - (h) "Standard conditions" means a temperature of 70° Fahrenheit and a

pressure of 14.7 pounds per square inch, absolute.

(i) "Waste" means any solid, liquid, or gaseous substance, the disposal of which may create an air pollution problem.

§ 76.2 Intent.

It is the intent of these standards that emissions to the atmosphere from Federal facilities and buildings shall not be permitted if such emissions endanger health or welfare and that emissions which are likely to be injurious or hazardous to people, animals, vegetation, or property shall be minimized.

§ 76.3 Applicability.

- (a) Unless otherwise indicated, the standards in this part apply to both new and existing Federal facilities and buildings.
- (b) Except for discharges of radioactive effluents which are regulated by the Atomic Energy Commission, Federal facilities and buildings shall conform to the air pollution standards prescribed by the State or community in which they are located. If State or local standards are not prescribed for a particular location, or if the State or local standards are less stringent than the standards prescribed herein, the standards in this part shall be applicable to discharges from such Federal facilities and buildings except as otherwise indicated.
- (c) Temporary operations that may result in potential air pollution problems, such as those associated with research, development, test, evaluation, space, and military activities, shall be conducted with such precautions and safeguards as are needed to achieve the intent of these standards.
- (d) The Administrator may, upon application of the relevant department, agency or establishment, exempt any Federal facility or building from any or

all of these standards whenever he determines that the activities of such building or facility will not significantly conflict with the intent of the Executive order and that such an exemption is in the public interest.

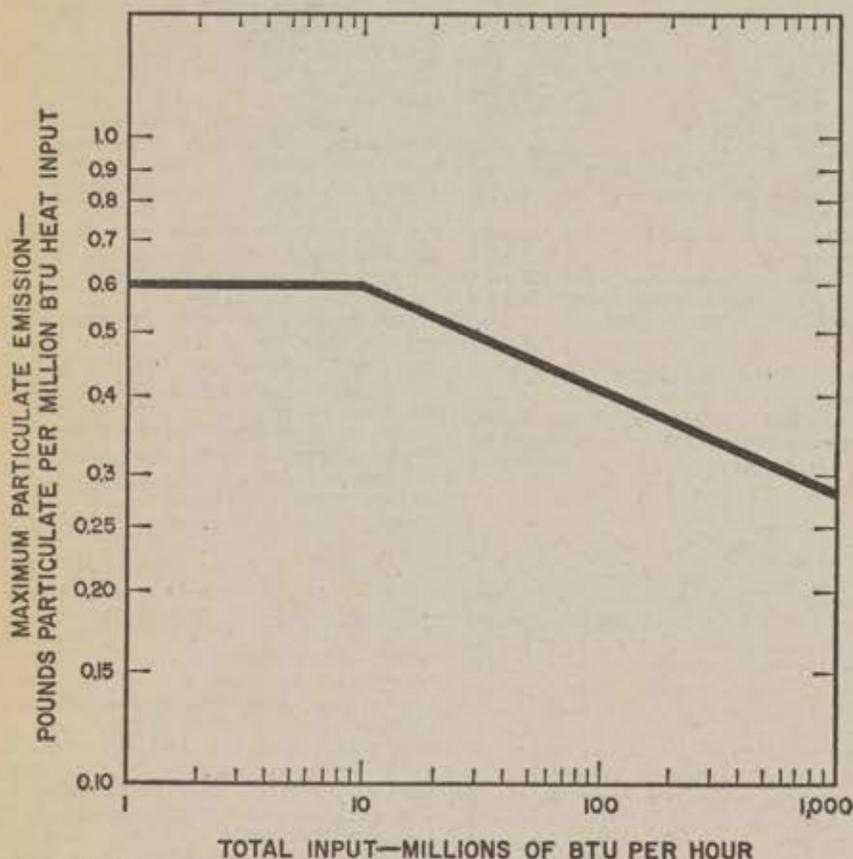
§ 76.4 Combustion of fuel.

(a) The following standards apply to the combustion units of facilities and buildings having a heat input of less than 1,000 million B.t.u./hour, other than fireplaces, stoves, or grills burning wood or charcoal:

- (1) Manually fired equipment shall not be installed as new or replacement equipment, except for the burning of anthracite, coke, or smokeless fuel.
- (2) (i) For new units, except during startup, cleaning of fires, or soot blowing, the density of any emission to the atmosphere shall not exceed No. 1 on the Ringelmann Scale.
- (ii) For existing units, except during startup, cleaning of fires, or soot blowing, the density of any emission to the atmosphere shall not exceed No. 2 on the Ringelmann Scale.
- (3) A photoelectric or other type smoke detector, recorder, or alarm shall be installed on units larger than ten million BTU per hour input, except where gas or light oil (No. 2 or lighter), is burned.
- (4) During routine operation, the emission of particles larger than 60 microns shall not normally occur.
- (5) Means shall be provided in all newly constructed units and wherever practicable in existing units to allow the periodic measurement of flyash and other particulate matter.
- (6) All new or replacement spreader stoker installations shall be of a type that automatically discharges ashes to the ash pit either continuously or in very frequent small increments, and flyash shall be reinjected only from boiler passes.
- (7) For units of less than 10 million BTU/hour heat input, the emission of flyash and other particulate matter shall not exceed 0.6 pounds of particulate matter per million BTU heat input, as measured by the American Society of Mechanical Engineers Power Test Code No. 27 for "Determining Dust Concentrations in a Gas Stream," or equivalent test method.
- (8) For units between 10 million and 1,000 million BTU/hour heat input, the emission of flyash and other particulate matter shall not exceed that specified in figure 1, as measured by the test method specified in subparagraph (7) of this paragraph.
- (b) For units having a heat input of more than 1,000 million BTU/hour, the appropriate department, agency, or establishment shall seek special advice from the Administrator with regard to smoke, flyash, and other particulate emissions.

FIGURE 1

MAXIMUM EMISSION OF PARTICULATE MATTER FROM FUEL BURNING INSTALLATIONS



§ 76.5 Sulfur oxides.

(a) Combustion units of facilities or buildings not located in areas specified by the Administrator under paragraph (c) of this section and whose heat input is less than 1,000 million BTU/hour shall burn the lowest sulfur content fuel that is reasonably available. In determining reasonable availability, the factors to be considered include, among others, price, firmness of supply, extent of existing pollution, and assurance of supply under adverse weather and natural disaster conditions.

(b) For combustion units or Federal facilities or buildings not located in areas specified by the Administrator under paragraph (c) of this section and whose heat input is more than 1,000 million BTU/hour, the appropriate department, agency, or establishment shall seek special advice from the Administrator with regard to sulfur-oxide emissions.

(c) (1) Effective October 1, 1969, combustion units of all Federal facilities or buildings located in the following areas shall comply with applicable emission limitations and control measures set out below:

(i) In the New Jersey-New York-Connecticut Interstate Air Quality Control Region as defined by 40 CFR Part 81, the emission rate of sulfur oxides (calculated as sulfur dioxide) from fuels used in combustion units shall not exceed 0.35 pounds per million B.t.u. (gross value) heat input.

(ii) In the Metropolitan Chicago Interstate Air Quality Control Region (Indiana-Illinois) and in the Metropolitan Philadelphia Interstate Air Quality Control Region (Pennsylvania-New Jersey-Delaware) as defined in 40 CFR Part 81, the emission rate of sulfur oxides (calculated as sulfur dioxide) from fuels used in combustion units shall not exceed 0.65 pounds per million B.t.u. (gross value) heat input.

(2) If compliance with the above emission standard is to be accomplished by means of controlled fuel quality, the agency responsible for each Federal facility in the designated areas shall establish appropriate fuel specifications to insure that the above emission limitations are met and shall provide for adequate tests to ascertain that delivered fuel meets the applicable specifications.

If removal of sulfur oxides from flue gases is used to control emissions, the facility shall provide for continuous monitoring and recording of the sulfur oxide content of flue gases emitted. The sulfur content of fuels shall be determined in accordance with current recognized testing procedures of the American Society for Testing and Materials. The sulfur content of the flue gases shall be determined in accordance with current recognized testing procedures of the American Society of Mechanical Engineers.

(3) The limitations and measures established in subparagraph (1) of this paragraph shall be revised or amended only after consultation with appropriate Federal, State, and local officials and affected parties. Not less than 30 days prior to prescribing such revised or amended limits or measures, the Administrator will publish in the FEDERAL REGISTER notice of his intention to adopt such limits or measures, and will thereafter publish in the FEDERAL REGISTER the limits or measures established. The Administrator may at any time designate other urban areas which suffer from extremely high air pollution levels, and after similar consultation, and publication in the FEDERAL REGISTER, prescribe such limits or measures as he determines are necessary to carry out the intent of Executive Order 11507.

(d) The emission of the oxides of sulfur the atmosphere shall be monitored at regular intervals by determining the sulfur content of the fuel used or by determining the sulfur content of flue gases.

§ 76.6 Stacks.

For buildings or facilities in nonurbanized areas, the particle emission standards of § 76.4(a) (7) and (8) may be revised for an individual installation by an amount to be determined by the Administrator when:

(a) The stack height exceeds by 2½ times the height of the highest building in that area, and

(b) The pollution level in any area will not be significantly increased thereby.

For large plants the determination of chimney height shall be based on air quality criteria, land use, and meteorological, topographical, aesthetic, and operating factors.

§ 76.7 Storage and handling of fuels and ash.

(a) Solid fuels and ash shall be stored and handled so as not to release to the atmosphere dust in significant quantities.

(b) In quantities of 40,000 gallons or more, gasoline or any volatile petroleum distillate or organic liquid having a vapor pressure of 1.5 p.s.i.a. or greater under actual storage conditions shall be stored in pressure tanks or reservoirs or shall be stored in containers equipped with a floating roof or vapor recovery system or other vapor emission control device.

(c) Stationary gasoline storage tanks with a capacity of 250 gallons or more shall be equipped with either submerged

filling inlets or with vapor recovery or emission control systems such that loss of vapor to the atmosphere during filling operations shall be minimized.

(d) Gasoline or petroleum distillate tank car or tank truck loading facilities handling 20,000 gallons per day or more shall be equipped with submersible filling arms or other vapor emission control systems.

§ 76.8 Disposal of waste.

(a) (1) Waste shall not be burned in open fires in urban areas.

(2) In nonurban areas, there shall not be burned in open fires, within a 24-hour period, more than 25 pounds of waste at a single site nor more than 500 pounds of waste at any number of sites within a 1-mile radius, except that these quantities may be exceeded in the case of on-site burning of waste produced in connection with operations performed at railroad rights-of-way, interurban highways, irrigation canals, forests, agricultural sites, etc., and provided that care is exercised to prevent creation of localized air pollution which endangers health or welfare. Deteriorated or unused explosives, munitions, rocket propellants, and certain hazardous wastes may be burned in open fires, in accordance with recognized procedures.

(3) Wastes shall not be left in open dumps.

(4) Wastes that are disposed of in sanitary landfills shall be disposed of in accordance with procedures described in "Sanitary Landfill Facts" (PHS publication No. 1792, 1968) and any amendments or revisions thereof. Said document is available to any interested person, whether or not affected by the provisions of this part, upon request to the Environmental Protection Agency, Office of Public Information, 5600 Fishers Lane, Rockville, MD 20852.

(b) (1) Waste shall be burned only in facilities especially designed for that purpose, except as provided in paragraph (a) of this section.

(2) For incinerators acquired on or after June 3, 1966 the density of any emission to the atmosphere shall not exceed number 1 on the Ringelmann Scale for a period or periods aggregating more than 3 minutes in any 1 hour, or be of such opacity as to obscure an observer's view to an equivalent degree.

(3) For incinerators acquired prior to June 3, 1966 the density of any emission to the atmosphere shall not exceed number 2 of the Ringelmann Scale for a period or periods aggregating more than 3 minutes in any 1 hour, or be of such opacity as to obscure an observer's view to an equivalent degree.

(c) (1) In addition, for installations burning more than 200 pounds of waste per hour, emissions shall not exceed 0.2 grain of particulate matter per standard cubic foot of dry flue gas corrected to 12 percent carbon dioxide (without the contribution of carbon dioxide from auxiliary fuel), measured in accordance with the test procedures described in "Specifications for Incinerator Testing at Federal Facilities" (PHS publication, Octo-

ber, 1967) and any amendments or revisions thereof. Said document is available to any interested person, whether or not affected by the provisions of this part, upon request to the Federal Sources Branch, Office of Air Programs, Environmental Protection Agency, Room 17B-42, 5600 Fishers Lane, Rockville, MD 20852, or to the Regional Offices of the agency.

(2) For installations burning 200 pounds of waste per hour or less, emissions shall not exceed 0.3 grain of particulate matter per standard cubic foot of dry flue gas corrected to 12 percent carbon dioxide (without the contribution of carbon dioxide from auxiliary fuel), measured in accordance with the test specifications described in "Specifications for Incinerator Testing at Federal Facilities" (PHS publication, October 1967) and any amendments or revisions thereof.

(3) Test procedures which are approved by the Administrator as equivalent to those prescribed by paragraphs (c) (1) and (c) (2) of this section may be used for the purpose of determining an installation's compliance with the emission standards for particulate matter contained in such paragraphs.

§ 76.9 Other pollution producing processes.

For dusts, fumes, or gases from any process not heretofore described, except for discharges of radioactive effluents regulated by the Atomic Energy Commission, whatever measures may be necessary to comply with the intent of these regulations shall be applied. This will generally require the installation of equipment or devices to minimize such emissions to the point where they will meet the standards contained in these regulations. For processes which emit toxic substances in quantities which might endanger health or welfare and for fires which emit smoke or fumes at official firefighting schools, the appropriate department, agency, or establishment shall seek special advice from the Administrator.

(NOTE: The Environmental Protection Agency will, from time to time, and after consultation with industries concerned, issue "Guides of Good Practice" for specific operations to aid Federal departments, agencies, and establishments in the selection of equipment and methods for meeting the performance standards. For emissions not covered herein, or for which there have been issued no applicable "Guides of Good Practice," the Environmental Protection Agency will provide technical material and consultation to departments, agencies, and establishments requesting such assistance. Requests for "Guides of Good Practice," technical material, or consultation should be directed either to the Federal Sources Branch, Office of Air Programs, Environmental Protection Agency, Room 17B-42, 5600 Fishers Lane, Rockville MD 20852, or to the Regional Offices of the Agency.)

PART 79—REGISTRATION OF FUEL ADDITIVES

Subpart A—General Provisions

- Sec. 79.1 Applicability.
- 79.2 Definitions.

- Sec. 79.3 Confidentiality of information.
- 79.4 Requirement of registration.
- 79.5 Reports of additive usage.

Subpart B—Registration Procedures

- 79.10 Notification by fuel manufacturer or processor.
- 79.11 Information and assurances to be provided by the fuel manufacturer or processor.
- 79.12 Action by the Administrator.
- 79.13 Notification by the additive manufacturer.
- 79.14 Information and assurances to be provided by the additive manufacturer.
- 79.15 Determination of noncompliance.
- 79.16 Registration.

Subpart C—Withdrawal of Registration

- 79.20 Withdrawal of registration: fuel manufacturer or processor.
- 79.21 Withdrawal of registration: additive manufacturer.

Subpart D—Designation of Fuels

- 79.30 Scope.
- 79.31 Motor gasolines.

AUTHORITY: The provisions of this Part 79 issued under sec. 210, 81 Stat. 502; Reorg. Plan 3 of 1970; 42 U.S.C. 1857f-6c; 3 CFR 1970 Comp.

Subpart A—General Provisions

§ 79.1 Applicability.

The regulations of this part apply to the registration of fuel additives contained in fuels designated by the Administrator, pursuant to the Act.

§ 79.2 Definitions.

As used in this part:

(a) "Act" means the Clean Air Act, as amended (42 U.S.C. 1857-1857i, as amended by Public Law 91-604).

(b) "Administrator" means the Administrator of the Environmental Protection Agency or his authorized representative.

(c) "Fuel" means any material which is capable of releasing energy or power by combustion or other chemical or physical reaction.

(d) "Fuel manufacturer or processor" means any person who causes or directs the alteration of the chemical composition or the mixture of chemical compounds in a fuel designated in this part by adding to it an additive.

(e) "Additive" means any substance added to a fuel designated in Subpart D, which is not exempted in the designation of the fuel.

(f) "Additive manufacturer" means any person who produces, formulates, or sells an additive under his own name.

(g) "Range of concentration" means the highest concentration, the lowest concentration and the average concentration used by the fuel manufacturer or processor.

(h) "Chemical composition" means the name and percentage by weight of any compound in an additive containing an element other than carbon or hydrogen and the name and percentage by weight of each element in the additive including carbon and hydrogen.

(i) "Chemical structure" means the molecular structure of any compound in

an additive containing an element other than carbon or hydrogen.

§ 79.3 Confidentiality of information.

All information reported to or otherwise obtained by the Administrator or his representatives pursuant to this part, which information contains or relates to a trade secret or other matter referred to in section 1905 of title 18 of the United States Code, shall be considered confidential for the purpose of such section 1905, except that such information may be disclosed to other officers or employees of the United States concerned with carrying out this Act or when relevant in any proceeding under title II of the Act. Nothing in this part shall authorize the withholding of information by the Administrator or any officer or employee under his control from the duly authorized committees of the Congress. Any such confidential information forwarded to a committee of the Congress will be identified as confidential information.

§ 79.4 Requirement of registration.

No manufacturer or processor of any fuel designated under this part may, after the date prescribed for such fuel in this part, deliver such fuel for introduction into interstate commerce or to another person who, it can reasonably be expected, will deliver such fuel for such introduction unless:

(a) For any additive contained in the fuel which does not appear on the list of registered additives maintained by the Administrator pursuant to § 79.16, such fuel manufacturer or processor has provided the information and assurances required under § 79.11 and has received notice of the registration of such additive; and

(b) For any additive contained in the fuel which appears on the list of registered additives maintained by the Administrator pursuant to § 79.16, such fuel manufacturer or processor, prior to or promptly upon initial use of such additive, provides the Administrator with an assurance that he will submit the information and assurances required under § 79.11 within 30 days of such initial use.

§ 79.5 Reports of additive usage.

Each fuel manufacturer or processor shall, on April 1 and October 1 of each year, submit to the Administrator a report of additive usage for each of the two quarterly periods comprising the 6-month period ending 1 month prior to the submission of such report. Each report shall show the range of concentration for any additive used during that quarter. Reports shall be submitted on forms which shall be supplied by the Administrator upon request of the fuel manufacturer or processor.

Subpart B—Registration Procedures

§ 79.10 Notification by fuel manufacturer or processor.

Any manufacturer or processor of a designated fuel who wishes to have an additive registered for use in such fuel shall, at least 120 days prior to the date prescribed by the Administrator in Sub-

part D or, if the additive is not in use by such fuel manufacturer or processor prior to such date of designation, 60 days prior to the date on which such fuel manufacturer or processor proposes to begin introducing a fuel containing such additive for delivery into interstate commerce or to another person who, it can reasonably be expected, will deliver such fuel for such introduction, notify the Administrator in accordance with § 79.11. Each notification shall be signed by the fuel manufacturer or processor or his agent, and shall be submitted on such forms as the Administrator shall supply upon request.

§ 79.11 Information and assurance to be provided by the fuel manufacturer or processor.

Each notification submitted by the fuel manufacturer or processor shall include the following:

(a) The commercial identifying name of any additive to be used in a designated fuel subsequent to the date prescribed for such fuel in Subpart D and any other name used by the fuel manufacturer or processor to identify such additive;

(b) The name and address of the additive manufacturer of any additive named;

(c) The range of concentration of any additive named, as follows:

(1) In the case of an additive used in a designated fuel at any time during the period beginning with the date of designation of such fuel and ending with the date of submission of a notification under this subpart, the range of concentration for any two successive weeks within the period of beginning with such date of designation and ending with such date of notification, and

(2) For any other additive, the expected range of concentration;

(d) The purpose in the use of any additive named, including:

(1) The function the additive is designed to perform, and

(2) Summaries of any information developed by or for the manufacturer concerning the mechanisms of action of the additive, reactions between the additive and the designated fuel, the identification and measurement of the emission products of the additive when used in the designated fuel, the effects of the additive on all emissions, and the toxicity or other effects of the emissions resulting from the use of the additive, together with assurances that additional information of this type which is developed by or for the manufacturer will be provided to the Administrator on April 1 of each year. Such submissions shall be accompanied by a description of the test procedures used in obtaining the information;

(e) Assurances that changes in information submitted pursuant to paragraphs (a), (b), and (d) (1) of this section will be provided to the Administrator, within 30 days of learning of such change. Forms for reporting changes will be provided by the Administrator at the fuel manufacturer or processor's request;

(f) Assurances that the reports of additive usage required by § 79.5 will be provided to the Administrator; and

(g) Assurances that the fuel manufacturer or processor will not represent, directly or indirectly, in any notice, circular, letter, or other written communication, or any written, oral, or pictorial notice or other announcement in any publication or by radio or television, that registration of an additive contained in a fuel constitutes endorsement, certification, or approval of the fuel or additive by any agency of the United States.

§ 79.12 Action by the Administrator.

Following receipt of a notification submitted by a fuel manufacturer or processor pursuant to § 79.11, the Administrator shall, in writing, advise the manufacturer of any unregistered additive named in such notification to provide the information and assurances required by § 79.14. The Administrator shall provide notification forms for the additive manufacturer's use.

§ 79.13 Notification by the additive manufacturer.

(a) Any additive manufacturer who has been advised by the Administrator pursuant to § 79.12, shall within 30 days file with the Administrator a notification in accordance with § 79.14. A separate notification shall be submitted for each additive. Each notification shall be signed by the additive manufacturer or his agent; and

(b) Any manufacturer of an additive designed for use in a fuel designated by the Administrator under Subpart D may file with the Administrator a notification in accordance with § 79.14. A separate notification, signed by the additive manufacturer or his agent, shall be submitted for each such additive. If such additive manufacturer has complied with the provisions of this part requiring the submission of information and the giving of assurances for any such additive, the Administrator shall provide such additive manufacturer with a letter acknowledging that compliance, and stating that registration of such additive may be accomplished at such time as any fuel manufacturer or processor complies with the notification requirements of § 79.10.

§ 79.14 Information and assurances to be provided by the additive manufacturer.

Each notification submitted by the additive manufacturer shall include the following:

(a) The recommended range of concentration of the additive;

(b) The recommended purpose in the use of the additive, including:

(1) The function such additive is designed to perform, and

(2) Summaries of any information developed by or for the manufacturer concerning the mechanisms of action of the additive, reactions between the additive and the designated fuel, the identification and measurement of the emission products of the additive when used in the designated fuel, the effects of the

additive on all emissions, and the toxicity or other effects of the emissions resulting from the use of the additive, together with assurances that additional information of this type which is developed by or for the manufacturer will be provided to the Administrator on April 1 of each year. Such submissions shall be accompanied by a description of the test procedures used in obtaining the information;

(c) The chemical composition of the additive;

(d) The chemical structure of such additive to the extent such information is available;

(e) Assurances that any change in information submitted pursuant to paragraphs (a), (b) (1), (c), and (d) of this § 79.14 will be provided to the Administrator within 30 days of such change. Forms for reporting changes will be provided by the Administrator at the additive manufacturer's request; and

(f) Assurances that the additive manufacturer will not represent directly or indirectly, in any notice, circular, letter or other written communication or any written, oral, or pictorial notice or other announcement in any publication or by radio or television that registration of any additive produced or formulated by him constitutes endorsement, certification, or approval by any agency of the United States.

§ 79.15 Determination of noncompliance.

Whenever the Administrator determines that there are deficiencies in a notification which constitute failure to comply with the regulations of this part, he shall inform the noncomplying fuel manufacturer or processor or noncomplying additive manufacturer of the reasons for such determination.

§ 79.16 Registration.

(a) If the provisions of this part requiring the submission of information and the giving of assurances have been complied with for a particular additive, the Administrator shall register that additive and notify the additive manufacturer and each fuel manufacturer or processor concerned of such registration; and

(b) The Administrator shall maintain a list of registered additives.

Subpart C—Withdrawal of Registration

§ 79.20 Withdrawal of registration: fuel manufacturer or processor.

If the Administrator determines that a fuel manufacturer or processor is not in compliance with the regulations of this part with respect to a registered additive, he may, after informing such noncomplying fuel manufacturer or processor of the reasons for such determination, and providing such noncomplying fuel manufacturer or processor a reasonable time in which to comply and/or to present his views concerning such determination, withdraw the registration of such additive for use in any designated

fuel of such noncomplying fuel manufacturer or processor.

§ 79.21 Withdrawal of registration: additive manufacturer.

If the Administrator determines that an additive manufacturer is not in compliance with the regulations of this part with respect to a registered additive, or the additive manufacturer requests withdrawal in writing, the Administrator may withdraw the registration of such additive and remove it from the list of registered additives maintained pursuant to § 79.16. The Administrator shall notify affected fuel manufacturers of such withdrawal by publication in the FEDERAL REGISTER, and may allow a period of 120 days during which a fuel manufacturer or processor may use any such additive he has on hand on the date of such withdrawal. Prior to withdrawing registration the Administrator shall:

(a) Inform such noncomplying additive manufacturer of the reasons for such determination; and

(b) Provide such noncomplying additive manufacturer a reasonable time in which to comply and/or to present his views concerning such determination.

Subpart D—Designation of Fuels

§ 79.30 Scope.

Fuels designated and dates prescribed by the Administrator for the registration of fuel additives are listed in this subpart. Additional fuels may be designated and additional dates prescribed as the Administrator deems advisable.

§ 79.31 Motor gasolines.

All fuels commonly or commercially known or sold as motor gasoline, with the exception of aviation gasoline, are hereby designated. All additives contained in such fuels must be registered by _____ (210 days following final publication of this notice). For the purpose of § 79.2(f) exemptions are made for:

(a) A catalyst used in manufacturing the fuel, but removed from the fuel before it is sold;

(b) Another fuel designated in this section which contains only registered additives and is blended with the fuel; and

(c) A substance which contains only one or more of the following elements: Carbon, hydrogen, and/or oxygen.

PART 81—AIR QUALITY CONTROL REGIONS, CRITERIA, AND CONTROL TECHNIQUES

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Sec. 81.1 Definitions.

Subpart B—Designation of Air Quality Control Regions

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81.12 National Capital Interstate Air Quality Control Region (District of Columbia, Maryland, and Virginia).
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Sec. 81.14 Metropolitan Chicago Interstate Air Quality Control Region (Indiana-Illinois).
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81.17 Metropolitan Los Angeles Air Quality Control Region.
81.18 Metropolitan St. Louis Interstate Air Quality Control Region (Missouri-Illinois).
81.19 Metropolitan Boston Intrastate Air Quality Region.
81.20 Metropolitan Cincinnati Interstate Air Quality Control Region.
81.21 The San Francisco Bay Area Intrastate Air Quality Control Region.
81.22 Greater Metropolitan Cleveland Intrastate Air Quality Control Region.
81.23 Southwest Pennsylvania Intrastate Air Quality Control Region.
81.24 Niagara Frontier Intrastate Air Quality Control Region.
81.25 Metropolitan Kansas City Intrastate Air Quality Control Region.
81.26 Hartford-New Haven-Springfield Interstate Air Quality Control Region.
81.27 Minneapolis-St. Paul Intrastate Air Quality Control Region.
81.28 Metropolitan Baltimore Intrastate Air Quality Control Region.
81.29 Metropolitan Indianapolis Intrastate Air Quality Control Region.
81.30 Metropolitan Milwaukee Intrastate Air Quality Control Region.
81.31 Metropolitan Providence Interstate Air Quality Control Region.
81.32 Puget Sound Intrastate Air Quality Control Region.
81.33 Steubenville-Weirton-Wheeling Interstate Air Quality Control Region.
81.34 Metropolitan Dayton Intrastate Air Quality Control Region.
81.35 Louisville Interstate Air Quality Control Region.
81.36 Phoenix-Tucson Intrastate Air Quality Control Region.
81.37 Metropolitan Detroit-Port Huron Intrastate Air Quality Control Region.
81.38 Metropolitan Houston-Galveston Intrastate Air Quality Control Region.
81.39 Metropolitan Dallas-Fort Worth Intrastate Air Quality Control Region.
81.40 Metropolitan San Antonio Intrastate Air Quality Control Region.
81.41 Metropolitan Birmingham Intrastate Air Quality Control Region.
81.42 Chattanooga Interstate Air Quality Control Region.
81.43 Metropolitan Toledo Interstate Air Quality Control Region.
81.44 Metropolitan Memphis Interstate Air Quality Control Region.
81.45 Metropolitan Atlanta Intrastate Air Quality Control Region.
81.46 U.S. Virgin Islands Air Quality Control Region.
81.47 Metropolitan Oklahoma City Intrastate Air Quality Control Region.
81.48 Champlain Valley Interstate Air Quality Control Region.
81.49 Southeast Florida Intrastate Air Quality Control Region.
81.50 Metropolitan Omaha-Council Bluffs Interstate Air Quality Control Region.
81.51 Portland Interstate Air Quality Control Region.
81.52 Wasatch Front Intrastate Air Quality Control Region.

- Sec. 81.53 Southern Louisiana-Southeast Texas Interstate Air Quality Control Region.
- 81.54 Cook Inlet Intrastate Air Quality Control Region.
- 81.55 Northeast Pennsylvania-Upper Delaware Valley Interstate Air Quality Control Region.
- 81.57 Bristol (Virginia)—Johnson City (Tennessee) Interstate Air Quality Control Region.
- 81.58 Columbus (Georgia)—Phenix City (Alabama) Interstate Air Quality Control Region.
- 81.59 Cumberland (Maryland)—Keyser (West Virginia) Interstate Air Quality Control Region.
- 81.60 Duluth (Minnesota)—Superior (Wisconsin) Interstate Air Quality Control Region.
- 81.61 Evansville (Indiana)—Owensboro-Henderson (Kentucky) Interstate Air Quality Control Region.
- 81.62 Alabama—Mississippi—Tennessee Interstate Air Quality Control Region.
- 81.63 Metropolitan Fort Smith Interstate Air Quality Control Region.
- 81.64 Huntington (West Virginia)—Ashland (Kentucky)—Portsmouth-Ironton (Ohio) Interstate Air Quality Control Region.
- 81.65 Joplin (Missouri)—Northeast Oklahoma Interstate Air Quality Control Region.
- 81.66 Southeast Minnesota-La Crosse (Wisconsin) Interstate Air Quality Control Region.
- 81.67 Menominee-Escanaba (Michigan)—Marinette (Wisconsin) Interstate Air Quality Control Region.
- 81.68 Mobile (Alabama)—Pensacola-Panama City (Florida)—Gulfport (Mississippi) Interstate Air Quality Control Region.
- 81.69 Paducah (Kentucky)—Cairo (Illinois) Interstate Air Quality Control Region.
- 81.70 Parkersburg (West Virginia)—Marietta (Ohio) Interstate Air Quality Control Region.
- 81.71 Rockford (Illinois)—Janesville-Beloit (Wisconsin) Interstate Air Quality Control Region.
- 81.72 Scottsboro (Alabama)—Jasper (Tennessee) Interstate Air Quality Control Region.
- 81.73 South Bend-Elkhart (Indiana)—Benton Harbor (Michigan) Interstate Air Quality Control Region.
- 81.74 Northwest Pennsylvania-Youngstown Interstate Air Quality Control Region.
- 81.75 Metropolitan Charlotte Interstate Air Quality Control Region.
- 81.76 State of Hawaii Air Quality Control Region.
- 81.77 Puerto Rico Air Quality Control Region.
- 81.78 Metropolitan Portland Intrastate Air Quality Control Region.
- 81.79 Metropolitan Tulsa Intrastate Air Quality Control Region.
- 81.80 Clark-Mohave Interstate Air Quality Control Region.
- 81.81 Merrimack Valley-Southern New Hampshire Interstate Air Quality Control Region.
- 81.82 El Paso-Las Cruces-Alamogordo Interstate Air Quality Control Region.
- 81.83 Albuquerque-Mid-Rio Grande Intrastate Air Quality Control Region.
- 81.84 Metropolitan Fargo-Moorhead Interstate Air Quality Control Region.

- Sec. 81.85 Metropolitan Sioux Falls Interstate Air Quality Control Region.
- 81.86 Metropolitan Sioux City Interstate Air Quality Control Region.
- 81.87 Metropolitan Boise Intrastate Air Quality Control Region.
- 81.88 Metropolitan Billings Intrastate Air Quality Control Region.
- 81.89 Metropolitan Cheyenne Intrastate Air Quality Control Region.
- 81.90 Androscoggin Valley Interstate Air Quality Control Region.
- 81.91 Jacksonville (Florida)—Brunswick (Georgia) Interstate Air Quality Control Region.
- 81.92 Monroe (Louisiana)—El Dorado (Arkansas) Interstate Air Quality Control Region.
- 81.93 Metropolitan Norfolk Intrastate Air Quality Control Region.
- 81.94 Shreveport-Texarkana-Tyler Interstate Air Quality Control Region.
- 81.95 Central Florida Intrastate Air Quality Control Region.
- 81.96 West Central Florida Intrastate Air Quality Control Region.
- 81.97 Southwest Florida Intrastate Air Quality Control Region.
- 81.98 Burlington-Keokuk Interstate Air Quality Control Region.
- 81.99 Arizona-New Mexico Southern Border Interstate Air Quality Control Region.
- 81.101 Metropolitan Dubuque Interstate Air Quality Control Region.
- 81.102 Metropolitan Quad Cities Interstate Air Quality Control Board.
- 81.104 Central Pennsylvania Intrastate Air Quality Control Region.
- 81.105 South Central Pennsylvania Intrastate Air Quality Control Region.
- 81.106 Greenville-Spartanburg Intrastate Air Quality Control Region.
- 81.107 Greenwood Intrastate Air Quality Control Region.
- 81.108 Columbia Intrastate Air Quality Control Region.
- 81.109 Florence Intrastate Air Quality Control Region.
- 81.110 Camden-Sumter Intrastate Air Quality Control Region.
- 81.111 Georgetown Intrastate Air Quality Control Region.
- 81.112 Charleston Intrastate Air Quality Control Region.
- 81.113 Savannah (Georgia)—Beaufort (South Carolina) Interstate Air Quality Control Region.
- 81.114 Augusta (Georgia)—Alken (South Carolina) Interstate Air Quality Control Region.

AUTHORITY: The provisions of this Part 81 issued under sections 107(a) and 301(a), 81 Stat. 490, 504; Reorg. Plan 3 of 1970; 42 U.S.C. 1857c-2(a), 1857g(a), 3 CFR 1970 Comp.

Subpart A—Meaning of Terms

§ 81.1 Definitions.

As used in this part, all terms not defined herein shall have the meaning given them by the Act.

(a) "Act" means the Clean Air Act as amended (42 U.S.C. 1857-1857I, as amended by Public Law 91-604).

(b) "Administrator" means the Administrator of the Environmental Protection Agency or his authorized representative.

Subpart B—Designation of Air Quality Control Regions

§ 81.11 Scope.

Air quality control regions designated by the Administrator pursuant to section

107 of the Act are listed in this subpart. Regions so designated are subject to revision, and additional regions may be designated, as the Administrator determines necessary to protect the public health and welfare.

§ 81.12 National Capital Interstate Air Quality Control Region (District of Columbia, Maryland, and Virginia).

The National Capital Interstate Air Quality Control Region (District of Columbia, Maryland, and Virginia) consists of the territorial area encompassed by the boundaries of the following jurisdictions (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

DISTRICT OF COLUMBIA

In the State of Maryland: Montgomery County; Prince Georges County.

In the State of Virginia: Arlington County; Fairfax County; Loudoun County; Prince William County.

(As so delimited, the Virginia portion of the region will include the city of Alexandria, the city of Fairfax, and the city of Falls Church.)

§ 81.13 New Jersey-New York-Connecticut Interstate Air Quality Control Region.

The New Jersey-New York-Connecticut Interstate Air Quality Control Region has been revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Connecticut:

Bethel Township.	Newtown Township.
Bridgeport Township.	Norwalk Township.
Brookfield Township.	Redding Township.
Danbury Township.	Ridgefield Township.
Darien Township.	Stamford Township.
Easton Township.	Stratford Township.
Fairfield Township.	Trumbull Township.
Greenwich Township.	Weston Township.
Monroe Township.	Westport Township.
New Canaan Township.	Wilton Township.
New Fairfield Township.	

In the State of New York:

Bronx County.	Richmond County.
Kings County.	Rockland County.
Nassau County.	Suffolk County.
New York County.	Westchester County.
Queens County.	

In the State of New Jersey:

Bergen County.	Morris County.
Essex County.	Passaic County.
Hudson County.	Somerset County.
Middlesex County.	Union County.
Monmouth County.	

§ 81.14 Metropolitan Chicago Interstate Air Quality Control Region.

The Metropolitan Chicago Interstate Air Quality Control Region (Illinois-Indiana) is revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial

area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Illinois:

Cook County.	Kendall County.
Du Page County.	Lake County.
Grundy County.	McHenry County.
Kane County.	Will County.
Kankakee County.	

In the State of Indiana:

Lake County.	Porter County.
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§ 81.15 Metropolitan Philadelphia Interstate Air Quality Control Region (Pennsylvania-New Jersey-Delaware).

The Metropolitan Philadelphia Interstate Air Quality Control Region (Pennsylvania-New Jersey-Delaware) consists of the territorial area encompassed by the boundaries of the following jurisdictions (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Pennsylvania: Bucks County, Chester County, Delaware County, Montgomery County, Philadelphia County.

In the State of New Jersey: Burlington County, Camden County, Gloucester County, Mercer County, Salem County.

In the State of Delaware: New Castle County.

§ 81.16 Metropolitan Denver Intrastate Air Quality Control Region.

The Metropolitan Denver Intrastate Air Quality Control Region (Colorado) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Colorado:

Adams County.	Denver County.
Arapahoe County.	Douglas County.
Boulder County.	Gilpin County.
Clear Creek County.	Jefferson County.

(Sec. 301(a), 81 Stat. 490, 504; 42 U.S.C. 1857 g(a) as amended by sec. 15(c)(2) of Public Law 91-604)

NOTE: For purposes of identification, the Regions are referred to by Colorado authorities as follows:

Sec.	
481.172	Comanche Intrastate Air Quality Control Region: Region Three.
481.173	Grand Mesa Intrastate Air Quality Control Region: Region Seven.
481.174	Pawnee Intrastate Air Quality Control Region: Region One.
481.175	San Isabel Intrastate Air Quality Control Region: Region Four.
481.176	San Luis Intrastate Air Quality Control Region: Region Five.
481.177	Yampa Intrastate Air Quality Control Region: Region Eight.
481.18	Metropolitan Denver Intrastate Air Quality Control Region: Region Two.

§ 81.17 Metropolitan Los Angeles Air Quality Control Region.

The Metropolitan Los Angeles Air Quality Control Region consists of the following territorial area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

Ventura County—the entire county;

Orange County—the entire county;

Riverside County—that portion of Riverside County which lies west of a line described as follows: Beginning at the point where the range line common to R. 4 E. and R. 3 E. intersects with Riverside-San Diego County boundary and running north along said range line; then east along the township line common to T. 8 S. and T. 7 S. to the southeast corner of sec. 36, T. 7 S., R. 3 E.; then north along the range line common to R. 4 E. and R. 3 E.; then east along the township line common to T. 8 S. and T. 7 S. to the southwest corner of sec. 34, T. 6 S., R. 4 E.; then north along the west boundaries of secs. 34, 27, 22, 15, 10, and 3, T. 6 S., R. 4 E.; then west along the township line common to T. 5 S. and T. 6 S.; then north along the range line common to R. 4 E. and R. 3 E.; then west along the south boundaries of secs. 13, 14, 15, 16, 17, and 18, T. 5 S., R. 3 E.; then north along the range line common to R. 2 E. and R. 3 E.; then west along the township line common to T. 4 S. and T. 3 S. to the intersection with the southwest boundary of partial sec. 31, T. 3 S., R. 1 W.; then northwest along that line to the intersection with the range line common to R. 2 W. and R. 1 W.; then north to the intersection of said range line with the Riverside-San Bernardino County line;

San Bernardino County—that portion of San Bernardino County which lies west and south of a line described as follows: Beginning at the point where the San Bernardino-Riverside County boundary is intersected by the range line common to R. 3 E. and R. 2 E. and running east along said county boundary; then north along the range line common to R. 3 E. and R. 2 E.; then west along the township line common to T. 3 N. and T. 2 N. to the intersection of said township line with the San Bernardino-Los Angeles County boundary;

Los Angeles County—that portion of Los Angeles County which lies south and west of a line described as follows: Beginning at the point where the township line common to T. 3 N. and T. 2 N. intersects with the Los Angeles-San Bernardino County boundary and running west along said township line; then north along the range line common to R. 8 W. and R. 9 W.; then west along the township line common to T. 4 N. and T. 3 N.; then north along the range line common to R. 12 W. and R. 13 W. to the southeast corner of sec. 12, T. 5 N., R. 13 W.; then west along the south boundaries of secs. 12, 11, 10, 9, 8, and 7, T. 5 N., R. 13 W. to the boundary of the Angeles National Forest which is collinear with the range line common to R. 13 W. and R. 14 W.; then north and west along the Angeles National Forest boundary to the point of intersection with the township line common to T. 7 N. and T. 6 N. (point is at the northwest corner of sec. 4 in T. 6 N., R. 14 W.); then west along the township line common to T. 7 N. and T. 6

N.; then north along the range line common to R. 15 W. and R. 16 W. to the southeast corner of sec. 13, T. 7 N., R. 16 W.; then west along the south boundaries of secs. 13, 14, 15, 16, 17, and 18, T. 7 N., R. 16 W.; then north along the range line common to R. 16 W. and R. 17 W. to the north boundary of the Angeles National Forest (collinear with township line common to T. 8 N. and T. 7 N.); then west and north along the Angeles National Forest boundary to the point of intersection with the south boundary of the Rancho La Liebre Land Grant; then west and north along this land grant boundary to the point at which it intersects with the Los Angeles-Kern County boundary; then west along said county boundary to the northwest corner of Los Angeles County;

Santa Barbara County—that portion of Santa Barbara County which lies south of a line described as follows: Beginning at the point where the Jalama Creek runs into the Pacific Ocean and running east and north along Jalama Creek to a point of intersection with the west boundary of the San Julian Land Grant; then south along the San Julian Land Grant boundary to its southwest corner; then east along the south boundary of the San Julian Land Grant to the northeast corner of partial sec. 20, T. 5 N., R. 32 W.; then south and east along the boundary of the Las Cruces Land Grant to the southwest corner of partial sec. 22, T. 5 N., R. 32 W.; then northeast along the Las Cruces Land Grant boundary; then east along the north boundaries of sec. 13, T. 5 N., R. 32 W., and secs. 18, 17, 16, 15, 14, 13, T. 5 N., R. 31 W., and secs. 18, 17, 16, 15, 14, 13, of T. 5 N., R. 30 W., and secs. 18, 17, 16, 15, T. 5 N., R. 29 W.; then south along the east boundary of sec. 15, T. 5 N., R. 29 W.; then east along the north boundaries of secs. 23 and 24, T. 5 N., R. 29 W., and secs. 19, 20, 21, 22, 23, 24, T. 5 N., R. 28 W., and secs. 19 and 20, T. 5 N., R. 27 W.; then south along the east boundary of sec. 20, T. 5 N., R. 27 W.; then east along the north boundaries of secs. 28, 27, 26, 25, T. 5 N., R. 27 W., and sec. 30, T. 5 N., R. 26 W.; then south along the east boundary of sec. 30, T. 5 N., R. 26 W.; then east along the north boundaries of secs. 32, 33, 34, 35, T. 5 N., R. 26 W.; then south along the east boundary of sec. 35, T. 5 N., R. 26 W.; then east along the township line common to T. 4 N. and T. 5 N. to the intersection of said township line with the Santa Barbara-Ventura County boundary.

§ 81.18 Metropolitan St. Louis Interstate Air Quality Control Region.

The Metropolitan St. Louis Interstate Air Quality Control Region (Missouri-Illinois) is revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Illinois:

Bond County.	Randolph County.
Clinton County.	St. Clair County.
Madison County.	Washington County.
Monroe County.	

In the State of Missouri:

Franklin County.	St. Louis City.
Jefferson County.	St. Louis County.
St. Charles County.	

§ 81.19 Metropolitan Boston Intrastate Air Quality Control Region.

The Metropolitan Boston Intrastate Air Quality Control Region (Massachusetts) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Massachusetts:

CITIES

Beverly.	Medford.
Boston.	Melrose.
Brockton.	Newton.
Cambridge.	Peabody.
Chelsea.	Quincy.
Everett.	Revere.
Gloucester.	Salem.
Lynn.	Somerville.
Malden.	Waltham.
Marlborough.	Woburn.

TOWNSHIPS

Abington.	Medfield.
Acton.	Middleton.
Arlington.	Mills.
Ashland.	Milton.
Avon.	Nahant.
Bedford.	Natick.
Belmont.	Needham.
Bolton.	Norfolk.
Boxborough.	North Reading.
Braintree.	Norwell.
Bridgewater.	Norwood.
Brookline.	Pembroke.
Burlington.	Randolph.
Canton.	Reading.
Cohasset.	Rockland.
Concord.	Rockport.
Danvers.	Saugus.
Dedham.	Scituate.
Dover.	Sharon.
Duxbury.	Sherborn.
East Bridgewater.	Southborough.
Easton.	Stoneham.
Essex.	Stoughton.
Framingham.	Stow.
Hamilton.	Sudbury.
Hanover.	Swampscott.
Hanson.	Topsfield.
Hingham.	Wakefield.
Holbrook.	Walpole.
Holliston.	Watertown.
Hopkinton.	Wayland.
Hudson.	Wellesley.
Hull.	Wenham.
Ipswich.	West Bridgewater.
Lexington.	Weston.
Lincoln.	Westwood.
Lynnfield.	Weymouth.
Manchester.	Whitman.
Marblehead.	Wilmington.
Marshfield.	Winchester.
Maynard.	Winthrop.

§ 81.20 Metropolitan Cincinnati Interstate Air Quality Control Region.

The Metropolitan Cincinnati Interstate Air Quality Control Region (Ohio-Kentucky-Indiana) is revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Kentucky:

Boone County.	Grant County.
Campbell County.	Kenton County.
Carroll County.	Owen County.
Gallatin County.	Pendleton County.

In the State of Indiana:

Dearborn County.	Ohio County.
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In the State of Ohio:

Butler County.	Hamilton County.
Clermont County.	Warren County.

§ 81.21 The San Francisco Bay Area Intrastate Air Quality Control Region.

The San Francisco Bay Area Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions (including the territorial area of all municipalities as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of California:

Sonoma County.	San Francisco County.
Napa County.	San Mateo County.
Solano County.	Alameda County.
Marin County.	Santa Clara County.
Contra Costa County.	

§ 81.22 Greater Metropolitan Cleveland Intrastate Air Quality Control Region.

The Greater Metropolitan Cleveland Intrastate Air Quality Control Region (Ohio) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Ohio:

Lorain County.	Portage County.
Cuyahoga County.	Summit County.
Lake County.	Medina County.
Geauga County.	Stark County.

§ 81.23 Southwest Pennsylvania Intrastate Air Quality Control Region.

The Southwest Pennsylvania Intrastate Air Quality Control Region is redesignated to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Pennsylvania:

Allegheny County.	Indiana County.
Armstrong County.	Washington County.
Beaver County.	County.
Butler County.	Westmoreland County.
Greene County.	
Fayette County.	

§ 81.24 Niagara Frontier Intrastate Air Quality Control Region.

The Niagara Frontier Intrastate Air Quality Control Region (New York) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically

located within the outermost boundaries of the area so delimited):

In the State of New York:
Erie County. Niagara County.

§ 81.25 Metropolitan Kansas City Interstate Air Quality Control Region.

The Metropolitan Kansas City Interstate Air Quality Control Region (Missouri-Kansas) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Missouri:

Buchanan County.	Jackson County.
Cass County.	Platte County.
Clay County.	Ray County.

In the State of Kansas:

Johnson County.	Wyandotte County.
Leavenworth County.	

§ 81.26 Hartford-New Haven-Springfield Interstate Air Quality Control Region.

The Hartford-New Haven-Springfield Interstate Air Quality Control Region (Connecticut-Massachusetts) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Connecticut:

CITIES

Ansonia.	Milford.
Bristol.	New Britain.
Derby.	New Haven.
Hartford.	Shelton.
Meriden.	Waterbury.
Middletown.	West Haven.

TOWNSHIPS

Andover.	Middlebury.
Avon.	Middlefield.
Beacon Falls.	Naugatuck.
Berlin.	Newington.
Bethany.	North Branford.
Bethlehem.	North Haven.
Bloomfield.	Orange.
Bolton.	Oxford.
Branford.	Plainville.
Burlington.	Plymouth.
Canton.	Portland.
Cheshire.	Prospect.
Cromwell.	Rocky Hill.
Durham.	Seymour.
East Granby.	Simsbury.
East Haddam.	Somers.
East Hampton.	Southbury.
East Hartford.	Southington.
East Haven.	South Windsor.
East Windsor.	Suffield.
Ellington.	Thomaston.
Enfield.	Tolland.
Farmington.	Vernon.
Glastonbury.	Wallingford.
Granby.	Watertown.
Gulford.	West Hartford.
Haddam.	Wethersfield.
Hamden.	Windsor.
Hebron.	Windsor Locks.
Madison.	Wolcott.
Manchester.	Woodbridge.
Marlborough.	Woodbury.

In the State of Massachusetts:
Franklin County.

CITIES

Chicopee. Springfield.
Holyoke. Westfield.
Northampton.

TOWNSHIPS

Agawam. Ludlow.
Amherst. Middlefield.
Belchertown. Monson.
Blandford. Montgomery.
Brimfield. Palmer.
Chester. Pelham.
Chesterfield. Plainfield.
Cummington. Russell.
Easthampton. Southampton.
East Longmeadow. Southwick.
Goshen. South Hadley.
Granby. Tolland.
Granville. Wales.
Hadley. Ware.
Hampden. Westhampton.
Hatfield. West Springfield.
Holland. Wilbraham.
Huntington. Williamaburg.
Longmeadow. Worthington.

(Sec. 301(a), 81 Stat. 504; 42 U.S.C. 1857g(a) as amended by sec. 15(c)(2) of Pub. L. 91-604)

§ 81.27 Minneapolis-St. Paul Intrastate Air Quality Control Region.

The Minneapolis-St. Paul Intrastate Air Quality Control Region (Minnesota) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Minnesota:

Anoka County. Ramsey County.
Carver County. Scott County.
Dakota County. Washington County.
Hennepin County.

§ 81.28 Metropolitan Baltimore Intrastate Air Quality Control Region.

The Metropolitan Baltimore Intrastate Air Quality Control Region (Maryland) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Maryland:

Anne Arundel County. Carroll County.
Baltimore City. Harford County.
Baltimore County. Howard County.

§ 81.29 Metropolitan Indianapolis Intrastate Air Quality Control Region.

The Metropolitan Indianapolis Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographi-

cally located within the outermost boundaries of the area so delimited):

In the State of Indiana:

Boone County. Johnson County.
Hamilton County. Marion County.
Hancock County. Morgan County.
Hendricks County. Shelby County.

§ 81.30 Southeastern Wisconsin Intrastate Air Quality Control Region.

The Metropolitan Milwaukee Intrastate Air Quality Control Region (Wisconsin) has been renamed the Southeastern Wisconsin Intrastate Air Quality Control Region and consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Wisconsin:

Kenosha County. Walworth County.
Milwaukee County. Washington County.
Ozaukee County. Waukesha County.
Racine County.

§ 81.31 Metropolitan Providence Interstate Air Quality Control Region.

The Metropolitan Providence Interstate Air Quality Control Region (Rhode Island-Massachusetts) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

The Entire State of Rhode Island.

In the State of Massachusetts:

CITIES

Attleboro. Fairhaven.
Fall River. Palmouth.
Acushnet. Foxborough.
Barnstable. Franklin.
Bellingham. Freetown.
Berkley. Gay Head.
Bourne. Gosnold.
Brewster. Halifax.
Carver. Harwich.
Chatham. Kingston.
Chilmark. Lakeville.
Dartmouth. Mansfield.
Dennis. Marion.
Dighton. Mashpee.
Eastham. New Bedford.
Edgartown. Taunton.

TOWNSHIPS

Middleborough. Rehoboth.
Milford. Rochester.
Nantucket. Sandwich.
North Attleborough. Seekonk.
Mattapoisett. Somerset.
Medway. Swansea.
Norton. Tisbury.
Oak Bluffs. Truro.
Orleans. Wareham.
Plainville. Wellfleet.
Plymouth. Westport.
Plympton. West Tisbury.
Provincetown. Wrentham.
Raynham. Yarmouth.

§ 81.32 Puget Sound Intrastate Air Quality Control Region.

The Puget Sound Intrastate Air Quality Control Region (Washington) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Washington:

King County. Pierce County.
Snohomish County. Kitsap County.

§ 81.33 Steubenville-Weirton-Wheeling Interstate Air Quality Control Region.

The Steubenville-Weirton-Wheeling Interstate Air Quality Control Region (Ohio-West Virginia) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Ohio:

Belmont County. Jefferson County.
Columbiana County. Monroe County.

In the State of West Virginia:

Brooke County. Marshall County.
Hancock County. Ohio County.

§ 81.34 Metropolitan Dayton Intrastate Air Quality Control Region.

The Metropolitan Dayton Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Ohio:

Clark County. Miami County.
Darke County. Montgomery County.
Greene County. Preble County.

§ 81.35 Louisville Interstate Air Quality Control Region.

The Louisville Interstate Air Quality Control Region (Kentucky-Indiana) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Kentucky:

Jefferson County.

In the State of Indiana:

Floyd County. Clark County.

§ 81.36 Phoenix-Tucson Intrastate Air Quality Control Region.

The Phoenix-Tucson Intrastate Air Quality Control Region (Arizona), consists of the territorial area encompassed

by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Arizona:

Gila County.	Pinal County.
Maricopa County.	Santa Cruz County.
Pima County.	

§ 81.37 Metropolitan Detroit-Port Huron Intrastate Air Quality Control Region.

The Metropolitan Detroit-Port Huron Intrastate Air Quality Control Region (Michigan) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Michigan:

Macomb County	Oakland County
St. Clair County	Wayne County

§ 81.38 Metropolitan Houston-Galveston Intrastate Air Quality Control Region.

The Metropolitan Houston-Galveston Intrastate Air Quality Control Region (Texas) has been revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Texas:

Austin County.	Liberty County.
Brazoria County.	Matagorda County.
Chambers County.	Montgomery County.
Colorado County.	Walker County.
Fort Bend County.	Waller County.
Galveston County.	Wharton County.
Harris County.	

§ 81.39 Metropolitan Dallas-Fort Worth Intrastate Air Quality Control Region.

The Metropolitan Dallas-Fort Worth Intrastate Air Quality Control Region (Texas) has been revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Texas:

Collin County.	Johnson County.
Cooke County.	Kaufman County.
Dallas County.	Navarro County.
Denton County.	Palo Pinto County.
Ellis County.	Parker County.
Erath County.	Rockwall County.
Fannin County.	Somervell County.
Grayson County.	Tarrant County.
Hood County.	Wise County.
Hunt County.	

§ 81.40 Metropolitan San Antonio Intrastate Air Quality Control Region.

The Metropolitan San Antonio Intrastate Air Quality Control Region (Texas) has been revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Texas:

Atascosa County.	Kerr County.
Bandera County.	Kimble County.
Bexar County.	Kinney County.
Comal County.	La Salle County.
Dimmit County.	Mason County.
Edwards County.	Maverick County.
Frio County.	Medina County.
Gillespie County.	Real County.
Gonzales County.	Uvalde County.
Guadalupe County.	Val Verde County.
Karnes County.	Wilson County.
Kendall County.	Zavala County.

§ 81.41 Metropolitan Birmingham Intrastate Air Quality Control Region.

The Metropolitan Birmingham Intrastate Air Quality Control Region (Alabama) has been revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Alabama:

Bibb County.	Lamar County.
Blount County.	Pickens County.
Chilton County.	St. Clair County.
Fayette County.	Shelby County.
Greene County.	Sumter County.
Hale County.	Tuscaloosa County.
Jefferson County.	Walker County.

§ 81.42 Chattanooga Interstate Air Quality Control Region.

The Chattanooga Interstate Air Quality Control Region (Georgia-Tennessee) has been revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Georgia:

Bartow County.	Gordon County.
Catoosa County.	Haralson County.
Chattooga County.	Murray County.
Cherokee County.	Paulding County.
Dade County.	Pickens County.
Fannin County.	Polk County.
Floyd County.	Walker County.
Gilmer County.	Whitefield County.

In the State of Tennessee:

Hamilton County.

§ 81.43 Metropolitan Toledo Interstate Air Quality Control Region.

The Metropolitan Toledo Interstate Air Quality Control Region (Ohio-

Michigan) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Ohio:

Lucas County. Wood County.

In the State of Michigan:

Monroe County.

§ 81.44 Metropolitan Memphis Interstate Air Quality Control Region.

The Metropolitan Memphis Interstate Air Quality Control Region (Arkansas-Mississippi-Tennessee) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Arkansas:

Crittenden County.

In the State of Mississippi:

De Soto County.

In the State of Tennessee:

Shelby County.

§ 81.45 Metropolitan Atlanta Intrastate Air Quality Control Region.

The Metropolitan Atlanta Intrastate Air Quality Control Region (Georgia) has been revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Georgia:

Butts County.	Heard County.
Carroll County.	Henry County.
Clayton County.	Lamar County.
Cobb County.	Meriwether County.
Coweta County.	Pike County.
De Kalb County.	Rockdale County.
Douglas County.	Spalding County.
Fayette County.	Troup County.
Fulton County.	Upson County.
Gwinnett County.	

§ 81.46 U.S. Virgin Islands Air Quality Control Region.

The U.S. Virgin Islands Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

The entire U.S. Virgin Islands.

§ 81.47 Central Oklahoma Intrastate Air Quality Control Region.

The Metropolitan Oklahoma Intrastate Air Quality Control Region has been

renamed the Central Oklahoma Intra-state Air Quality Control Region and consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Oklahoma:

Canadian County.	Kingsfisher County.
Cleveland County.	McClain County.
Grady County.	Oklahoma County.
Lincoln County.	Pottawatomie County.
Logan County.	

§ 81.48 Champlain Valley Interstate Air Quality Control Region.

The Champlain Valley Interstate Air Quality Control Region (Vermont-New York) has been revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Vermont:

Addison County.	Grand Isle County.
Chittenden County.	Rutland County.
Franklin County.	

In the State of New York:

Clinton County.	St. Lawrence County.
Essex County.	Warren County.
Franklin County.	Washington County.
Hamilton County.	

§ 81.49 Southeast Florida Intrastate Air Quality Control Region.

The Southeast Florida Intrastate Air Quality Control Region is redesignated to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Florida:

Broward County.	Monroe County.
Dade County.	Okeechobee County.
Indian River County.	Palm Beach County.
Martin County.	St. Lucie County.

§ 81.50 Metropolitan Omaha-Council Bluffs Interstate Air Quality Control Region.

The Metropolitan Omaha-Council Bluffs Interstate Air Quality Control Region (Nebraska-Iowa) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Nebraska:

Douglas County. Sarpy County.

In the State of Iowa:

Pottawattamie County.

§ 81.51 Portland Interstate Air Quality Control Region.

The Portland Interstate Air Quality Control Region (Oregon-Washington) has been revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Oregon:

Benton County.	Marion County.
Clackamas County.	Multnomah County.
Columbia County.	Polk County.
Lane County.	Washington County.
Linn County.	Yamhill County.

In the State of Washington:

Clark County.	Skamania County.
Cowlitz County.	Wahkiakum County.
Lewis County.	

NOTE: For purposes of identification, the Portland Interstate Air Quality Control Region (Oregon-Washington) will be referred to by Washington authorities as the Portland (Oregon)-Southwest Washington Interstate Air Quality Control Region.

§ 81.52 Wasatch Front Intrastate Air Quality Control Region.

The Wasatch Front Intrastate Air Quality Control Region (Utah) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Utah:

Davis County.	Utah County.
Salt Lake County.	Weber County.
Tooele County.	

§ 81.53 Southern Louisiana-Southeast Texas Interstate Air Quality Control Region.

The Southern Louisiana-Southwest Texas Interstate Air Quality Control Region has been revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Louisiana:

Acadia Parish.	Plaquemines Parish.
Allen Parish.	Pointe Coupee Parish.
Ascension Parish.	Rapides Parish.
Assumption Parish.	St. Bernard Parish.
Avoyesles Parish.	St. Charles Parish.
Beauregard Parish.	St. Helena Parish.
Calcasieu Parish.	St. James Parish.
Cameron Parish.	St. John the Baptist Parish.
East Baton Rouge Parish.	St. Landry Parish.
East Feliciana Parish.	St. Martin Parish.
Evangeline Parish.	St. Mary Parish.
Grant Parish.	St. Tammany Parish.
Iberville Parish.	Tangipahoa Parish.
Iberville Parish.	Terrebonne Parish.
Jefferson Parish.	Vermilion Parish.
Jefferson Davis Parish.	Vernon Parish.
Lafayette Parish.	Washington Parish.
Lafourche Parish.	West Baton Rouge Parish.
Livingston Parish.	West Feliciana Parish.
Orleans Parish.	

In the State of Texas:

Angelina County.	Polk County.
Hardin County.	Sabine County.
Houston County.	San Augustine County.
Jasper County.	San Jacinto County.
Jefferson County.	Shelby County.
Nacogdoches County.	Trinity County.
Newton County.	Tyler County.
Orange County.	

§ 81.54 Cook Inlet Intrastate Air Quality Control Region.

The Cook Inlet Intrastate Air Quality Control Region (Alaska) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Alaska:

Greater Anchorage Area Borough.
Kenai Peninsula Borough.
Matanuska-Susitna Borough.

§ 81.55 Northeast Pennsylvania-Upper Delaware Valley Interstate Air Quality Control Region.

The Northeast Pennsylvania-Upper Delaware Valley Interstate Air Quality Control Region (Pennsylvania-New Jersey) is redesignated to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Pennsylvania:

Berks County.	Pike County.
Bradford County.	Schuylkill County.
Carbon County.	Sullivan County.
Lackawanna County.	Susquehanna County.
Lehigh County.	Tioga County.
Luzerne County.	Wayne County.
Monroe County.	Wyoming County.
Northampton County.	

In the State of New Jersey:

Hunterdon County.	Warren County.
Sussex County.	

§ 81.57 Eastern Tennessee-Southwestern Virginia Interstate Air Quality Control Region.

The Bristol (Virginia)-Johnson City (Tennessee) Interstate Air Quality Control Region has been renamed the Eastern Tennessee-Southwestern Virginia Interstate Air Quality Control Region and revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857 h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Tennessee:

Anderson County.	Knox County.
Blount County.	Loudon County.
Bradley County.	McMinn County.
Campbell County.	Meigs County.
Carter County.	Monroe County.
Claiborne County.	Polk County.
Cooke County.	Rhea County.
Grainger County.	Roane County.
Greene County.	Sevier County.
Hamblen County.	Sullivan County.
Hancock County.	Union County.
Hawkins County.	Washington County.
Jefferson County.	
Johnson County.	

In the State of Virginia:

Bland County.	Norton City.
Bristol City.	Russell County.
Buchanan County.	Scott County.
Carroll County.	Smyth County.
Dickenson County.	Tazewell County.
Galax City.	Washington County.
Grayson County.	Wise County.
Lee County.	Wythe County.

§ 81.58 Columbus (Georgia)-Phenix City (Alabama) Interstate Air Quality Control Region.

The Columbus (Georgia)-Phenix City (Alabama) Interstate Air Quality Control Region has been revised to consist of the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Alabama:

Autauga County.	Lowndes County.
Bullock County.	Macon County.
Butler County.	Montgomery County.
Crenshaw County.	Pike County.
Elmore County.	Russell County.
Lee County.	

In the State of Georgia:

Chattahoochee County.	Schley County.
Dooly County.	Stewart County.
Harris County.	Sumter County.
Marion County.	Talbot County.
Muscogee County.	Taylor County.
Quitman County.	Webster County.

§ 81.59 Cumberland-Keyser Interstate Air Quality Control Region.

The Cumberland-Keyser Interstate Air Quality Control Region (Maryland-West Virginia) has been revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions (including the territorial area of all

municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Maryland:

Allegany County.	Washington County.
Garrett County.	

In the State of West Virginia:

In Grant County:
Union Magisterial District.

In Mineral County:

Elk Magisterial District.	Piedmont Magisterial District.
New Creek Magisterial District.	

§ 81.60 Duluth (Minnesota)-Superior (Wisconsin) Interstate Air Quality Control Region.

The Duluth (Minnesota)-Superior (Wisconsin) Interstate Air Quality Control Region has been revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Minnesota:

Aitkin County.	Koochiching County.
Carlton County.	Lake County.
Cook County.	St. Louis County.
Itasca County.	

In the State of Wisconsin:

Ashland County.	Price County.
Bayfield County.	Rusk County.
Burnett County.	Sawyer County.
Douglas County.	Taylor County.
Iron County.	Washburn County.

§ 81.61 Evansville (Indiana)-Owensboro-Henderson (Kentucky) Interstate Air Quality Control Region.

The Evansville (Indiana)-Owensboro-Henderson (Kentucky) Interstate Air Quality Control Region is revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Kentucky:

Daviess County.	Ohio County.
Hancock County.	Union County.
Henderson County.	Webster County.
McLean County.	

In the State of Indiana:

Dubois County.	Spencer County.
Gibson County.	Vanderburgh County.
Perry County.	Warrick County.
Pike County.	
Posey County.	

§ 81.62 Northeast Mississippi Intrastate Air Quality Control Region.

The Alabama - Mississippi - Tennessee Interstate Air Quality Control Region has been renamed the Northeast Mississippi Intrastate Air Quality Control

Region and revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Mississippi:

Alcorn County.	Marshall County.
Attala County.	Monroe County.
Benton County.	Montgomery County.
Calhoun County.	Neshoba County.
Carroll County.	Noxubee County.
Chickasaw County.	Oktibbeha County.
Choctaw County.	Panola County.
Clay County.	Pontotoc County.
Grenada County.	Prentiss County.
Holmes County.	Tate County.
Itawamba County.	Tippah County.
Kemper County.	Tishomingo County.
Lafayette County.	Union County.
Leake County.	Webster County.
Lee County.	Winston County.
Lowndes County.	Yalobusha County.

§ 81.63 Metropolitan Fort Smith Interstate Air Quality Control Region.

The Metropolitan Fort Smith Interstate Air Quality Control Region (Arkansas-Oklahoma) has been revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Arkansas:

Benton County.	Sebastian County.
Crawford County.	Washington County.

In the State of Oklahoma:

Adair County.	Le Flore County.
Cherokee County.	Sequoyah County.

§ 81.64 Huntington (West Virginia)-Ashland (Kentucky)-Portsmouth-Ironton (Ohio) Interstate Air Quality Control Region.

The Huntington (West Virginia)-Ashland (Kentucky)-Portsmouth-Ironton (Ohio) Interstate Air Quality Control Region is revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions of described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Kentucky:

Bath County.	Lewis County.
Boyd County.	Mason County.
Bracken County.	Menifee County.
Carter County.	Montgomery County.
Elliott County.	County.
Fleming County.	Morgan County.
Greenup County.	Robertson County.
Lawrence County.	Rowan County.

In the State of Ohio:

Adams County.	Lawrence County.
Brown County.	Scioto County.
Gallia County.	

In the State of West Virginia:
Cabell County. Wayne County.
Mason County.

§ 81.65 Joplin (Missouri)-Northeast Oklahoma Interstate Air Quality Control Region.

The Joplin (Missouri)-Northeast Oklahoma Interstate Air Quality Control Region, designated on December 8, 1970, and consisting of the counties of Barton, Jasper, McDonald, and Newton in the State of Missouri and Craig, Delaware, and Ottawa in the State of Oklahoma, is revoked effective upon publication.

§ 81.66 Southeast Minnesota-La Crosse (Wisconsin) Interstate Air Quality Control Region.

The Southeast Minnesota-La Crosse (Wisconsin) Interstate Air Quality Control Region has been revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857m(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Minnesota:

Blue Earth County.	Mower County.
Brown County.	Nicollet County.
Dodge County.	Olmsted County.
Faribault County.	Rice County.
Fillmore County.	Sibley County.
Freeborn County.	Steele County.
Goodhue County.	Wabasha County.
Houston County.	Waseca County.
Le Sueur County.	Watsonwan County.
Martin County.	Winona County.

In the State of Wisconsin:

Barron County.	La Crosse County.
Buffalo County.	Monroe County.
Chippewa County.	Pepin County.
Clark County.	Pierce County.
Crawford County.	Polk County.
Dunn County.	St. Croix County.
Eau Claire County.	Trempealeau County.
Jackson County.	Vernon County.

§ 81.67 Lake Michigan Intrastate Air Quality Control Region.

The Menominee-Escanaba (Michigan)-Marinette (Wisconsin) Interstate Air Quality Control Region has been renamed the Lake Michigan Intrastate Air Quality Control Region (Wisconsin) and revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Wisconsin:

Brown County.	Menominee County.
Calumet County.	Oconto County.
Door County.	Outagamie County.
Fond du Lac County.	Shawano County.
Green Lake County.	Sheboygan County.
Kewaunee County.	Waupaca County.
Manitowoc County.	Waushara County.
Marinette County.	Winnebago County.
Marquette County.	

§ 81.68 Mobile (Alabama)-Pensacola-Panama City (Florida)-Gulfport (Mississippi) Interstate Air Quality Control Region.

The Mobile (Alabama)-Pensacola-Panama City (Florida)-Gulfport (Mississippi) Interstate Air Quality Control Region has been renamed the Mobile (Alabama)-Pensacola-Panama City (Florida)-Southern Mississippi Interstate Air Quality Control Region and revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Alabama:

Baldwin County.	Mobile County.
Escambia County.	

In the State of Florida:

Bay County.	Jackson County.
Calhoun County.	Okaloosa County.
Escambia County.	Santa Rosa County.
Gulf County.	Walton County.
Holmes County.	Washington County.

In the State of Mississippi:

Adams County.	Lamar County.
Amite County.	Lauderdale County.
Clalborne County.	Lawrence County.
Clarke County.	Lincoln County.
Copiah County.	Madison County.
Covington County.	Marion County.
Forrest County.	Newton County.
Franklin County.	Pearl River County.
George County.	Perry County.
Greene County.	Pike County.
Hancock County.	Rankin County.
Harrison County.	Scott County.
Hinds County.	Simpson County.
Jackson County.	Smith County.
Jasper County.	Stone County.
Jefferson County.	Walthall County.
Jefferson Davis County.	Warren County.
Jones County.	Wayne County.
	Wilkinson County.

§ 81.69 Paducah (Kentucky)-Cairo (Illinois) Interstate Air Quality Control Region.

The Paducah (Kentucky)-Cairo (Illinois) Interstate Air Quality Control Region is revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Illinois:

Alexander County.	Pope County.
Johnson County.	Pulaski County.
Massac County.	Union County.

In the State of Kentucky:

Ballard County.	Hopkins County.
Caldwell County.	Livingston County.
Calloway County.	Lyon County.
Carlisle County.	Marshall County.
Christian County.	McCracken County.
Crittenden County.	Muhlenberg County.
Fulton County.	Todd County.
Graves County.	Trigg County.
Hickman County.	

§ 81.70 Parkersburg (West Virginia)-Marietta (Ohio) Interstate Air Quality Control Region.

The Parkersburg (West Virginia)-Marietta (Ohio) Interstate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of West Virginia:

Jackson County.	Wetzel County.
Pleasants County.	Wood County.
Tyler County.	

In the State of Ohio:

Athens County.	Morgan County.
Meigs County.	Washington County.

§ 81.71 Rockford (Illinois)-Janesville-Beloit (Wisconsin) Interstate Air Quality Control Region.

The Rockford (Illinois)-Janesville-Beloit (Wisconsin) Interstate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Illinois:

Boone County.	Stephenson County.
De Kalb County.	Winnebago County.
Ogle County.	

In the State of Wisconsin:

Rock County.

§ 81.72 Tennessee River Valley (Alabama)-Cumberland Mountains (Tennessee) Interstate Air Quality Control Region.

The Scottsboro (Alabama)-Jasper (Tennessee) Interstate Air Quality Control Region has been renamed the Tennessee River Valley (Alabama)-Cumberland Mountains (Tennessee) Interstate Air Quality Control Region and revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Alabama:

Colbert County.	Limestone County.
Cullman County.	Madison County.
De Kalb County.	Marion County.
Franklin County.	Marshall County.
Jackson County.	Morgan County.
Lauderdale County.	Winston County.
Lawrence County.	

In the State of Tennessee:

Bledsoe County.	Overton County.
Coffee County.	Pickett County.
Cumberland County.	Putnam County.
Fentress County.	Scott County.
Franklin County.	Sequatchie County.
Grundy County.	Warren County.
Marion County.	White County.
Morgan County.	Van Buren County.

§ 81.73 South Bend-Elkhart (Indiana)—Benton Harbor (Michigan) Interstate Air Quality Control Region.

The South Bend-Elkhart (Indiana)—Benton Harbor (Michigan) Interstate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Indiana:

Elkhart County.	Marshall County.
Kosciusko County.	St. Joseph County.
La Porte County.	

In the State of Michigan:

Berrien County.	Van Buren County.
Cass County.	

§ 81.74 Northwest Pennsylvania-Youngstown Interstate Air Quality Control Region.

The Northwest Pennsylvania-Youngstown Interstate Air Quality Control Region (Pennsylvania-Ohio) is redesignated to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Ohio:

Ashtabula County.	Trumbull County.
Mahoning County.	

In the State of Pennsylvania:

Cameron County.	Jefferson County.
Clarion County.	Lawrence County.
Clearfield County.	McKean County.
Crawford County.	Mercer County.
Elk County.	Potter County.
Erie County.	Venango County.
Forest County.	Warren County.

§ 81.75 Metropolitan Charlotte Interstate Air Quality Control Region.

The Metropolitan Charlotte Interstate Air Quality Control Region (North Carolina-South Carolina) has been revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of North Carolina:

Cabarrus County.	Mecklenburg County.
Gaston County.	
Iredell County.	Rowan County.
Lincoln County.	Stanly County.
	Union County.

In the State of South Carolina:

Chester County.	Union County.
Lancaster County.	York County.

§ 81.76 State of Hawaii Air Quality Control Region.

The State of Hawaii Air Quality Control Region consists of the territorial area encompassed by the outermost boundaries of the State of Hawaii (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited).

§ 81.77 Puerto Rico Air Quality Control Region.

The Puerto Rico Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

The entire Commonwealth of Puerto Rico:

Puerto Rico and surrounding islands.
Vieques and surrounding islands.
Culebra and surrounding islands.

§ 81.78 Metropolitan Portland Intrastate Air Quality Control Region.

The Metropolitan Portland Intrastate Air Quality Control Region (Maine) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Maine:

COUNTIES	
Cumberland.	York.
Sagadahoc.	
TOWNS	
Brownfield.	Hiram.
Denmark.	Porter.
Fryeburg.	

§ 81.79 Northeastern Oklahoma Intrastate Air Quality Control Region.

The Metropolitan Tulsa Intrastate Air Quality Control Region has been renamed the Northeastern Oklahoma Intrastate Air Quality Control Region and revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Oklahoma:

Craig County.	Osage County.
Creek County.	Ottawa County.
Delaware County.	Pawnee County.
Mayes County.	Rogers County.
Muskogee County.	Tulsa County.
Nowata County.	Wagoner County.
Okmulgee County.	Washington County.

§ 81.80 Clark-Mohave Interstate Air Quality Control Region.

The Clark-Mohave Interstate Air Quality Control Region (Nevada-Arizona) has been revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Nevada:

Clark County.

In the State of Arizona:

Mohave County. Yuma County.

§ 81.81 Merrimack Valley-Southern New Hampshire Interstate Air Quality Control Region.

The Merrimack Valley Southern New Hampshire Interstate Air Quality Control Region (Massachusetts-New Hampshire) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Massachusetts:

In Essex County, the towns of:

Andover.	Methuen.
Amesbury.	Newbury.
Boxford.	Newburyport.
Georgetown.	North Andover.
Groveland.	Rowley.
Haverhill.	Salisbury.
Lawrence.	West Newbury.
Merrimac.	

In Middlesex County, the towns of:

Ayer.	Littleton.
Billerica.	Lowell.
Carlisle.	Pepperell.
Chelmsford.	Tewksbury.
Dracut.	Tyngsborough.
Dunstable.	Westford.
Groton.	

In the State of New Hampshire:

The counties of:

Belknap.	Rockingham.
Cheshire.	Strafford.
Hillsborough.	Sullivan.
Merrimack.	

§ 81.82 El Paso-Las Cruces-Alamogordo Interstate Air Quality Control Region.

The El Paso-Las Cruces-Alamogordo Interstate Air Quality Control Region (New Mexico-Texas) is revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Texas:

Brewster County.	Hudspeth County.
Culberson County.	Jeff Davis County.
El Paso County.	Presidio County.

In the State of New Mexico:
 Dona Ana County. Otero County.
 Lincoln County. Sierra County.

§ 81.83 Albuquerque-Mid Rio Grande Intrastate Air Quality Control Region.

The Albuquerque-Mid Rio Grande Intrastate Air Quality Control Region (New Mexico) is revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of New Mexico:
 Bernalillo County.

Those portions of Sandoval County lying east of the Continental Divide:
 Those portions of Valencia County lying east of a line described as follows: Starting at the point at which the south boundary of Bernalillo County intersects with the section line between secs. 1 and 2 T. 7 N., R. 2 W.; thence south to the southern boundary of the Laguna Indian Reservation between secs. 35 and 36 T. 7 N., R. 2 W.; then southerly on section lines to the Socorro-Valencia County line at secs. 11, 12, 13, and 14, T. 5 N., R. 2 W.

§ 81.84 Metropolitan Fargo-Moorhead Interstate Air Quality Control Region.

The Metropolitan Fargo-Moorhead Interstate Air Quality Control Region (North Dakota-Minnesota) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of North Dakota:
 Cass County.

In the State of Minnesota:
 Clay County.

§ 81.85 Metropolitan Sioux Falls Interstate Air Quality Control Region.

The Metropolitan Sioux Falls Interstate Air Quality Control Region (Iowa-South Dakota) has been revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Iowa:
 Lyon County.

In the State of South Dakota:
 Lincoln County. Minnehaha County.
 McCook County. Turner County.

Note: For purposes of identification, this Region is referred to by Minnesota authorities as follows:

Sec.
 481.60 Duluth (Minnesota)-Superior (Wisconsin) Interstate Air Quality Control Region: Northeast Minnesota Region.

For purposes of identification, these Regions are referred to by Wisconsin authorities as follows:

Sec.
 481.60 Duluth (Minnesota)-Superior (Wisconsin) Interstate Air Quality Control Region: Northwestern Wisconsin Region.
 481.66 Southeast Minnesota-La Crosse (Wisconsin) Interstate Air Quality Control Region: West Central Wisconsin Region.

§ 81.86 Metropolitan Sioux City Interstate Air Quality Control Region.

The Metropolitan Sioux City Interstate Air Quality Control Region (Iowa-Nebraska-South Dakota) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Iowa:
 Plymouth County. Woodbury County.
 Sioux County.

In the State of Nebraska:
 Dakota County.

In the State of South Dakota:
 Union County.

§ 81.87 Metropolitan Boise Intrastate Air Quality Control Region.

The Metropolitan Boise Intrastate Air Quality Control Region (Idaho) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Idaho:
 Ada County. Canyon County.

§ 81.88 Billings Intrastate Air Quality Control Region.

The Metropolitan Billings Intrastate Air Quality Control Region (Montana) has been renamed the Billings Intrastate Air Quality Control Region and consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Montana:
 Big Horn County. Musselshell County.
 Carbon County. Petroleum County.
 Fergus County. Stillwater County.
 Golden Valley County. Sweet Grass County.
 Judith Basin County. Wheatland County.
 Yellowstone County.

(Sec. 301(a), 81 Stat. 490, 504; 42 U.S.C. 1857g(a) as amended by sec. 15(c) (2) of Public Law 91-604)

Note: For purposes of identification, the Regions are referred to by Montana authorities as follows:

Sec.
 481.168 Great Falls Intrastate Air Quality Control Region: Region II.
 481.169 Helena Intrastate Air Quality Control Region: Region IV.
 481.170 Miles City Intrastate Air Quality Control Region: Region III.
 481.171 Missoula Intrastate Air Quality Control Region: Region I.
 481.88 Billings Intrastate Air Quality Control Region: Region V.

§ 81.89 Metropolitan Cheyenne Intrastate Air Quality Control Region.

The Metropolitan Cheyenne Intrastate Air Quality Control Region (Wyoming) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Wyoming:
 Albany County. Laramie County.
 Goshen County. Platte County.

§ 81.90 Androscoggin Valley Interstate Air Quality Control Region.

The Androscoggin Valley Interstate Air Quality Control Region (Maine-New Hampshire) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Maine:
 Androscoggin County. Knox County.
 Kennebec County. Lincoln County.
 Waldo County.

In the County of Franklin:
 Avon Town. Phillips Town.
 Carthage Town. Salem Township.
 Chesterville Town. Strong Town.
 Farmington Town. Temple Town.
 Freeman Township. Township No. 6.
 Industry Town. Washington Township.
 Jay Town. Weld Town.
 New Sharon Town. Wilton Town.
 New Vineyard Town.
 Perkins Township.

In the County of Oxford:
 Albany Township. Mason Township.
 Andover Town. Mexico Town.
 Andover North. Milton Township.
 Surplus. Newry Town.
 Andover West. Norway Town.
 Surplus. Oxford Town.
 Batchelders Grant. Paris Town.
 Bethel Town. Peru Town.
 Buckfield Town. Riley Township.
 Byron Town. Roxbury Town.
 Canton Town. Rumford Town.
 Dixfield Town. Stoneham Town.
 Gilead Town. Stow Town.
 Grafton Township. Summer Town.
 Greenwood Town. Sweden Town.
 Hanover Town. Waterford Town.
 Hartford Town. West Paris Town.
 Hebron Town. Woodstock Town.
 Lovell Town.

Somerset County—That portion of Somerset County which lies south and east of a line described as follows: Beginning at the point

where the Somerset-Franklin County boundary is intersected by a line common to the northern boundary of New Portland Township and running northeast along the northern boundaries of New Portland, Embden, Solon, and Athens Townships to the intersection of said line with the Somerset-Placataquis County boundary, which is also common to the northeast corner of Athens Township.

In the State of New Hampshire:

Cass County.

§ 81.91 Jacksonville (Florida)-Brunswick (Georgia) Interstate Air Quality Control Region.

The Jacksonville (Florida)-Brunswick (Georgia) Interstate Air Quality Control Region has been revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Florida:

Alachua County.	Lafayette County.
Baker County.	Leon County.
Bradford County.	Liberty County.
Clay County.	Madison County.
Columbia County.	Marion County.
Dixie County.	Nassau County.
Duval County.	Putnam County.
Flagler County.	St. Johns County.
Franklin County.	Suwannee County.
Gadsden County.	Taylor County.
Gilchrist County.	Union County.
Hamilton County.	Wakulla County.
Jefferson County.	

In the State of Georgia:

Appling County.	Coffee County.
Atkinson County.	Glynn County.
Bacon County.	Long County.
Brantley County.	McIntosh County.
Camden County.	Pierce County.
Chariton County.	Ware County.
Clinch County.	Wayne County.

§ 81.92 Monroe (Louisiana)—El Dorado (Arkansas) Interstate Air Quality Control Region.

The Monroe (Louisiana)—El Dorado (Arkansas) Interstate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Louisiana:

Caldwell Parish.	Morehouse Parish.
Catahoula Parish.	Ouachita Parish.
Concordia Parish.	Richland Parish.
East Carroll Parish.	Tensas Parish.
Franklin Parish.	Union Parish.
La Salle Parish.	West Carroll Parish.
Madison Parish.	

In the State of Arkansas:

Ashley County.	Nevada County.
Bradley County.	Ouachita County.
Calhoun County.	Union County.

§ 81.93 Hampton Roads Intrastate Air Quality Control Region.

The Metropolitan Norfolk Intrastate Air Quality Control Region (Virginia)

consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Virginia:

COUNTIES	
Isle of Wight.	Southampton.
James City.	York.
Nansemond.	
CITIES	
Chesapeake.	Portsmouth.
Franklin.	Suffolk.
Hampton.	Virginia Beach.
Newport News.	Williamsburg.
Norfolk.	

§ 81.94 Shreveport-Texarkana-Tyler Interstate Air Quality Control Region.

The Shreveport-Texarkana-Tyler Interstate Air Quality Control Region (Arkansas-Louisiana-Oklahoma-Texas) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Arkansas:

Columbia County.	Little River County.
Hempstead County.	Miller County.
Howard County.	Sevier County.
Lafayette County.	

In the State of Louisiana:

Bienville Parish.	Lincoln Parish.
Bossier Parish.	Natchitoches Parish.
Caddo Parish.	Red River Parish.
Claborn Parish.	Sabine Parish.
De Soto Parish.	Webster Parish.
Jackson Parish.	Winn Parish.

In the State of Oklahoma:

McCurtain County.

In the State of Texas:

Anderson County.	Marion County.
Bowie County.	Morris County.
Camp County.	Panola County.
Cass County.	Rains County.
Cherokee County.	Red River County.
Delta County.	Rusk County.
Franklin County.	Smith County.
Gregg County.	Titus County.
Harrison County.	Upshur County.
Henderson County.	Van Zandt County.
Hopkins County.	Wood County.
Lamar County.	

§ 81.95 Central Florida Intrastate Air Quality Control Region.

The Central Florida Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Florida:

Brevard County.	Osceola County.
Lake County.	Seminole County.
Orange County.	Volusia County.

§ 81.96 West Central Florida Intrastate Air Quality Control Region.

The West Central Florida Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Florida:

Citrus County.	Manatee County.
Hardee County.	Pasco County.
Hernando County.	Pinellas County.
Hillsborough County.	Polk County.
Levy County.	Sumter County.

§ 81.97 Southwest Florida Intrastate Air Quality Control Region.

The Southwest Florida Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Florida:

Charlotte County.	Hendry County.
Collier County.	Highlands County.
De Soto County.	Lee County.
Glades County.	Sarasota County.

§ 81.98 Burlington-Keokuk Interstate Air Quality Control Region.

The Burlington-Keokuk Interstate Air Quality Control Region (Illinois-Iowa) is revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Illinois:

Fulton County.	Mason County.
Hancock County.	Peoria County.
Henderson County.	Tazewell County.
Knox County.	Warren County.
McDonough County.	Woodford County.

In the State of Iowa:

Des Moines County.	Lee County.
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NOTE: For purposes of identification, the regions are referred to by Illinois authorities as follows:

Sec.	
481.14	Metropolitan Chicago Interstate Air Quality Control Region: Region III.
481.262	North Central Illinois Intrastate Air Quality Control Region: Region V.
481.98	Burlington-Keokuk Interstate Air Quality Control Region: Region VI.
481.263	East Central Illinois Intrastate Air Quality Control Region: Region VII.
481.264	West Central Illinois Intrastate Air Quality Control Region: Region VIII.
481.18	Metropolitan St. Louis Interstate Air Quality Control Region: Region IX.

Sec.
481.265 Southeast Illinois Intrastate Air Quality Control Region: Region X.

481.69 Paducah-Cairo Interstate Air Quality Control Region: Region XI.

§ 81.99 Arizona-New Mexico Southern Border Interstate Air Quality Control Region.

The Arizona-New Mexico Southern Border Interstate Air Quality Control Region (Arizona-New Mexico) is revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Arizona:

Cochise County. Greenlee County.
Graham County.

In the State of New Mexico:

Grant County. Luna County.
Hidalgo County.

§ 81.100 Eastern Washington-Northern Idaho Interstate Air Quality Control Region.

The Eastern Washington-Northern Idaho Interstate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Idaho:

Benewah County. Nez Perce County.
Kootenai County. Shoshone County.
Latah County.

In the State of Washington:

Adams County. Grant County.
Asotin County. Lincoln County.
Columbia County. Spokane County.
Garfield County. Whitman County.

§ 81.101 Metropolitan Dubuque Interstate Air Quality Control Region.

The Metropolitan Dubuque Interstate Air Quality Control Region (Illinois-Iowa-Wisconsin) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Illinois:

Jo Daviess County.

In the State of Iowa:

Clayton County. Jackson County.
Dubuque County.

In the State of Wisconsin:

Grant County.

§ 81.102 Metropolitan Quad Cities Interstate Air Quality Control Region.

The Metropolitan Quad Cities Interstate Air Quality Control Region (Illinois-Iowa)

nois-Iowa) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Illinois:

Carroll County. Rock Island County.
Henry County. Whiteside County.
Mercer County.

In the State of Iowa:

Clinton County. Muscatine County.
Louisa County. Scott County.

§ 81.104 Central Pennsylvania Intrastate Air Quality Control Region.

The Central Pennsylvania Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Pennsylvania:

Bedford County. Lycoming County.
Blair County. Mifflin County.
Cambria County. Montour County.
Centre County. Northumberland County.
Clinton County. Snyder County.
Columbia County. Somerset County.
Fulton County. Union County.
Huntingdon County.
Juniata County.

§ 81.105 South Central Pennsylvania Intrastate Air Quality Control Region.

The South Central Pennsylvania Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Pennsylvania:

Adams County. Lancaster County.
Cumberland County. Lebanon County.
Dauphin County. Perry County.
Franklin County. York County.

§ 81.106 Greenville-Spartanburg Intrastate Air Quality Control Region.

The Greenville-Spartanburg Intrastate Air Quality Control Region (South Carolina) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of South Carolina:

Anderson County. Pickens County.
Cherokee County. Spartanburg County.
Greenville County. Union County.
Oconee County.

§ 81.107 Greenwood Intrastate Air Quality Control Region.

The Greenwood Intrastate Air Quality Control Region (South Carolina) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of South Carolina:

Abbeville County. Laurens County.
Edgefield County. McCormick County.
Greenwood County. Saluda County.

§ 81.108 Columbia Intrastate Air Quality Control Region.

The Columbia Intrastate Air Quality Control Region (South Carolina) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of South Carolina:

Fairfield County. Newberry County.
Lexington County. Richland County.

§ 81.109 Florence Intrastate Air Quality Control Region.

The Florence Intrastate Air Quality Control Region (South Carolina) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of South Carolina:

Chesterfield County. Florence County.
Darlington County. Marion County.
Dillon County. Marlboro County.

§ 81.110 Camden-Sumter Intrastate Air Quality Control Region.

The Camden-Sumter Intrastate Air Quality Control Region (South Carolina) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of South Carolina:

Clarendon County. Lee County.
Kershaw County. Sumter County.

§ 81.111 Georgetown Intrastate Air Quality Control Region.

The Georgetown Intrastate Air Quality Control Region (South Carolina) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

RULES AND REGULATIONS

In the State of South Carolina:
Georgetown County. Williamsburg
Horry County. County.

§ 81.112 Charleston Intrastate Air Quality Control Region.

The Charleston Intrastate Air Quality Control Region (South Carolina) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of South Carolina:
Berkeley County. Dorchester County.
Charleston County.

NOTE: For purposes of identification, the regions are referred to by South Carolina authorities as follows:

Sec.	
481.106	Greenville-Spartanburg Intrastate Air Quality Control Region: Region 1.
481.107	Greenwood Intrastate Air Quality Control Region: Region 2.
481.108	Columbia Intrastate Air Quality Control Region: Region 4.
481.109	Florence Intrastate Air Quality Control Region: Region 7.
481.110	Camden-Sumter Intrastate Air Quality Control Region: Region 6.
481.111	Georgetown Intrastate Air Quality Control Region: Region 8.
481.112	Charleston Intrastate Air Quality Control Region: Region 9.

§ 81.113 Savannah (Georgia)-Beaufort (South Carolina) Interstate Air Quality Control Region.

The Savannah (Georgia)-Beaufort (South Carolina) Interstate Air Quality Control Region has been revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of South Carolina:
Beaufort County. Hampton County.
Colleton County. Jasper County.

In the State of Georgia:
Bryan County. Effingham County.
Bulloch County. Evans County.
Candler County. Liberty County.
Chatham County. Tattnall County.

§ 81.114 Augusta (Georgia)-Aiken (South Carolina) Interstate Air Quality Control Region.

The Augusta (Georgia)-Aiken (South Carolina) Interstate Air Quality Control Region has been revised to consist of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Georgia:

Burke County.	McDuffie County.
Columbia County.	Richmond County.
Emanuel County.	Screven County.
Gloucester County.	Taliaferro County.
Jefferson County.	Warren County.
Jenkins County.	Wilkes County.
Lincoln County.	

In the State of South Carolina:

Aiken County.	Barnwell County.
Allendale County.	Calhoun County.
Bamberg County.	Orangeburg County.

NOTE: For identification purposes, the Columbus (Georgia)-Phenix City (Alabama) Interstate Air Quality Control Region is referred to by Alabama authorities as the Alabama State Capital-Columbus (Georgia) Interstate Air Quality Control Region.

§ 81.115 Northwest Nevada Intrastate Air Quality Control Region.

The Northwest Nevada Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Nevada:
Carson City. Storey County.
Douglas County. Washoe County.
Lyon County.

§ 81.116 Northern Missouri Intrastate Air Quality Control Region.

The Northern Missouri Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Missouri:
Adair County. Lincoln County.
Andrew County. Linn County.
Atchison County. Livingston County.
Audrain County. Macon County.
Boone County. Marion County.
Caldwell County. Mercer County.
Callaway County. Moniteau County.
Carroll County. Monroe County.
Chariton County. Montgomery County.
Clark County. Nodaway County.
Clinton County. Osage County.
Cole County. Pike County.
Cooper County. Putnam County.
Davies County. Ralls County.
De Kalb County. Randolph County.
Gentry County. Saline County.
Grundy County. Schuyler County.
Harrison County. Scotland County.
Holt County. Shelby County.
Howard County. Sullivan County.
Knox County. Warren County.
Lewis County. Worth County.

§ 81.117 Southeast Missouri Intrastate Air Quality Control Region.

The Southeast Missouri Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions

or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Missouri:
Boling County. New Madrid County.
Butler County. Pemiscot County.
Cape Girardeau County. Perry County.
Carter County. Phelps County.
Crawford County. Reynolds County.
Dent County. Ripley County.
Dunklin County. St. Francois County.
Gasconade County. Ste. Genevieve County.
Iron County. Scott County.
Madison County. Stoddard County.
Marion County. Washington County.
Mississippi County. Wayne County.

§ 81.118 Southwest Missouri Intrastate Air Quality Control Region.

The Southwest Missouri Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Missouri:
Barton County. Lawrence County.
Barry County. McDonald County.
Bates County. Miller County.
Benton County. Morgan County.
Camden County. Newton County.
Cedar County. Oregon County.
Christian County. Ozark County.
Dade County. Pettis County.
Dallas County. Polk County.
Douglas County. Pulaski County.
Greene County. St. Clair County.
Henry County. Shannon County.
Hickory County. Stone County.
Howell County. Taney County.
Jasper County. Texas County.
Johnson County. Vernon County.
Laclede County. Webster County.
Lafayette County. Wright County.

§ 81.119 Western Tennessee Intrastate Air Quality Control Region.

The Western Tennessee Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Tennessee:
Benton County. Haywood County.
Carroll County. Henderson County.
Chester County. Henry County.
Crockett County. Lake County.
Decatur County. Lauderdale County.
Dyer County. McNairy County.
Payette County. Madison County.
Gibson County. Obion County.
Hardeman County. Tipton County.
Hardin County. Weakley County.

§ 81.120 Middle Tennessee Intrastate Air Quality Control Region.

The Middle Tennessee Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Tennessee:

- | | |
|-------------------|--------------------|
| Bedford County. | Macon County. |
| Cannon County. | Marshall County. |
| Chestnut County. | Maury County. |
| Clay County. | Montgomery County. |
| Davidson County. | Moore County. |
| De Kalb County. | Perry County. |
| Dickson County. | Robertson County. |
| Giles County. | Rutherford County. |
| Hickman County. | Smith County. |
| Houston County. | Stewart County. |
| Humphreys County. | Sumner County. |
| Jackson County. | Trousdale County. |
| Lawrence County. | Wayne County. |
| Lewis County. | Williamson County. |
| Lincoln County. | Wilson County. |

§ 81.121 Four Corners Interstate Air Quality Control Region.

The Four Corners Interstate Air Quality Control Region (Arizona-Colorado-New Mexico-Utah) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Arizona:

- | | |
|------------------|-----------------|
| Apache County. | Navajo County. |
| Coconino County. | Yavapai County. |

In the State of Colorado:

- | | |
|-------------------|-------------------|
| Archuleta County. | Montezuma County. |
| Dolores County. | San Juan County. |
| La Plata County. | |

In the State of New Mexico:

- San Juan County, in its entirety.
- Portion of Rio Arriba County lying west (Pacific slope) of the Continental Divide, and all portions of the Jicarilla Apache Indian Reservation lying east (Atlantic slope) of the Continental Divide.
- Portion of Sandoval County lying west (Pacific slope) of the Continental Divide, and all portions of the Jicarilla Apache Indian Reservation lying east (Atlantic slope) of the Continental Divide.
- Portion of McKinley County lying west (Pacific slope) of the Continental Divide.
- Portion of Valencia County lying within the Zuni and Ramah Navajo Indian Reservations.

In the State of Utah:

- | | |
|------------------|---------------------|
| Emery County. | Kane County. |
| Garfield County. | San Juan County. |
| Grand County. | Washtington County. |
| Iron County. | Wayne County. |

§ 81.122 Mississippi Delta Intrastate Air Quality Control Region.

The Mississippi Delta Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the terri-

torial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Mississippi:

- | | |
|-------------------|----------------------|
| Bolivar County. | Sharkey County. |
| Coahoma County. | Sunflower County. |
| Humphreys County. | Tallahatchie County. |
| Issaquena County. | Tunica County. |
| Leflore County. | Washington County. |
| Quitman County. | Yazoo County. |

§ 81.123 Southeastern Oklahoma Intrastate Air Quality Control Region.

The Southeastern Oklahoma Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Oklahoma:

- | | |
|------------------|--------------------|
| Atoka County. | Latimer County. |
| Bryan County. | Love County. |
| Carter County. | McIntosh County. |
| Choctaw County. | Marshall County. |
| Coal County. | Murray County. |
| Garvin County. | Okfuskee County. |
| Haskell County. | Pittsburg County. |
| Hughes County. | Pontotoc County. |
| Johnston County. | Pushmataha County. |
| | Seminole County. |

§ 81.124 North Central Oklahoma Intrastate Air Quality Control Region.

The North Central Oklahoma Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Oklahoma:

- | | |
|------------------|---------------|
| Garfield County. | Noble County. |
| Grant County. | Payne County. |
| Kay County. | |

§ 81.125 Southwestern Oklahoma Intrastate Air Quality Control Region.

The Southwestern Oklahoma Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Oklahoma:

- | | |
|------------------|-------------------|
| Beckham County. | Jackson County. |
| Caddo County. | Jefferson County. |
| Comanche County. | Kiowa County. |
| Cotton County. | Stephens County. |
| Greer County. | Tillman County. |
| Harmon County. | Washita County. |

§ 81.126 Northwestern Oklahoma Intrastate Air Quality Control Region.

The Northwestern Oklahoma Intrastate Air Quality Control Region consists of the territorial area encompassed

by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Oklahoma:

- | | |
|------------------|---------------------|
| Alfalfa County. | Harper County. |
| Beaver County. | Major County. |
| Elaine County. | Roger Mills County. |
| Cimarron County. | Texas County. |
| Custer County. | Woods County. |
| Dewey County. | Woodward County. |
| Ellis County. | |

§ 81.127 Central New York Intrastate Air Quality Control Region.

The Central New York Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of New York:

- | | |
|-------------------|------------------|
| Cayuga County. | Madison County. |
| Cortland County. | Oneida County. |
| Herkimer County. | Onondaga County. |
| Jefferson County. | Oswego County. |
| Lewis County. | |

§ 81.128 Genesee-Finger Lakes Intrastate Air Quality Control Region.

The Genesee-Finger Lakes Intrastate Air Quality Control Region (New York) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of New York:

- | | |
|--------------------|-----------------|
| Genesee County. | Seneca County. |
| Livingston County. | Wayne County. |
| Monroe County. | Wyoming County. |
| Ontario County. | Yates County. |
| Orleans County. | |

§ 81.129 Hudson Valley Intrastate Air Quality Control Region.

The Hudson Valley Intrastate Air Quality Control Region (New York) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of New York:

- | | |
|--------------------|---------------------|
| Albany County. | Putnam County. |
| Columbia County. | Rensselaer County. |
| Dutchess County. | Saratoga County. |
| Fulton County. | Schenectady County. |
| Greene County. | Schoharie County. |
| Montgomery County. | Ulster County. |
| Orange County. | |

§ 81.130 Southern Tier East Intrastate Air Quality Control Region.

The Southern Tier East Intrastate Air Quality Control Region (New York) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of New York:

Broome County.	Otsego County.
Chenango County.	Sullivan County.
Delaware County.	Tioga County.

§ 81.131 Southern Tier West Intrastate Air Quality Control Region.

The Southern Tier West Intrastate Air Quality Control Region (New York) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of New York:

Allegany County.	Schuyler County.
Cattaraugus County.	Steuben County.
Chautauqua County.	Tompkins County.
Chemung County.	

§ 81.132 Abilene-Wichita Falls Intrastate Air Quality Control Region.

The Abilene-Wichita Falls Intrastate Air Quality Control Region (Texas) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Texas:

Archer County.	Kent County.
Baylor County.	Knox County.
Brown County.	Mitchell County.
Callahan County.	Montague County.
Childress County.	Nolan County.
Clay County.	Runnels County.
Coleman County.	Scurry County.
Comanche County.	Shackelford County.
Cottle County.	Stephens County.
Eastland County.	Stonewall County.
Fisher County.	Taylor County.
Foard County.	Throckmorton County.
Hardeman County.	Wichita County.
Haskell County.	Wilbarger County.
Jack County.	Young County.
Jones County.	

§ 81.133 Amarillo-Lubbock Intrastate Air Quality Control Region.

The Amarillo-Lubbock Intrastate Air Quality Control Region (Texas) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Texas:

Armstrong County.	Hockley County.
Bailey County.	Hutchinson County.
Briscoe County.	King County.
Carson County.	Lamb County.
Castro County.	Lipscomb County.
Cochran County.	Lubbock County.
Collingsworth County.	Lynn County.
Crosby County.	Moore County.
Dallam County.	Motley County.
Deaf Smith County.	Ochiltree County.
Dickens County.	Oldham County.
Donley County.	Parmer County.
Floyd County.	Potter County.
Garza County.	Randall County.
Gray County.	Roberts County.
Hale County.	Sherman County.
Hall County.	Swisher County.
Hansford County.	Terry County.
Hartley County.	Wheeler County.
Hemphill County.	Yoakum County.

§ 81.134 Austin-Waco Intrastate Air Quality Control Region.

The Austin-Waco Intrastate Air Quality Control Region (Texas) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Texas:

Bastrop County.	Hill County.
Bell County.	Lampasas County.
Blanco County.	Lee County.
Bosque County.	Leon County.
Brazos County.	Limestone County.
Burleson County.	Llano County.
Burnet County.	McLennan County.
Caldwell County.	Madison County.
Coryell County.	Milam County.
Falls County.	Mills County.
Fayette County.	Robertson County.
Freestone County.	Travis County.
Grimes County.	Washington County.
Hamilton County.	Williamson County.
Hays County.	

§ 81.135 Brownsville-Laredo Intrastate Air Quality Control Region.

The Brownsville-Laredo Intrastate Air Quality Control Region (Texas) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Texas:

Cameron County.	Webb County.
Hidalgo County.	Willacy County.
Jim Hogg County.	Zapata County.
Starr County.	

§ 81.136 Corpus Christi-Victoria Intrastate Air Quality Control Region.

The Corpus Christi-Victoria Intrastate Air Quality Control Region (Texas) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically

located within the outermost boundaries of the area so delimited):

In the State of Texas:

Aransas County.	Kenedy County.
Bee County.	Kleberg County.
Brooks County.	Lavaca County.
Calhoun County.	Live Oak County.
De Witt County.	McMullen County.
Duval County.	Nueces County.
Goliad County.	Refugio County.
Jackson County.	San Patricio County.
Jim Wells County.	Victoria County.

§ 81.137 Midland-Odessa-San Angelo Intrastate Air Quality Control Region.

The Midland-Odessa-San Angelo Intrastate Air Quality Control Region (Texas) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(e)) geographically located within the outermost boundaries of the area so delimited):

In the State of Texas:

Andrews County.	Menard County.
Borden County.	Midland County.
Coke County.	Pecos County.
Concho County.	Reagan County.
Crane County.	Reeves County.
Crockett County.	San Saba County.
Dawson County.	Schleicher County.
Ector County.	Sterling County.
Gaines County.	Sutton County.
Glasscock County.	Terrell County.
Howard County.	Tom Green County.
Iron County.	Upton County.
Loving County.	Ward County.
Martin County.	Winkler County.
McCulloch County.	

§ 81.138 Central Arkansas Intrastate Air Quality Control Region.

The Central Arkansas Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Arkansas:

Chicot County.	Hot Spring County.
Clark County.	Jefferson County.
Cleveland County.	Lincoln County.
Conway County.	Lonoke County.
Dallas County.	Perry County.
Desha County.	Pope County.
Drew County.	Pulaski County.
Faulkner County.	Saline County.
Garland County.	Yell County.
Grant County.	

§ 81.139 Northeast Arkansas Intrastate Air Quality Control Region.

The Northeast Arkansas Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Arkansas:

- | | |
|----------------------|-----------------------|
| Arkansas County. | Monroe County. |
| Clay County. | Phillips County. |
| Craighead County. | Poinsett County. |
| Cross County. | Prairie County. |
| Greene County. | Randolph County. |
| Independence County. | Saint Francis County. |
| Jackson County. | Sharp County. |
| Lawrence County. | White County. |
| Lee County. | Woodruff County. |
| Mississippi County. | |

§ 81.140 Northwest Arkansas Intrastate Air Quality Control Region.

The Northwest Arkansas Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Arkansas:

- | | |
|------------------|--------------------|
| Baxter County. | Marion County. |
| Boone County. | Montgomery County. |
| Carroll County. | Newton County. |
| Cleburne County. | Pike County. |
| Franklin County. | Polk County. |
| Fulton County. | Scott County. |
| Isard County. | Searcy County. |
| Johnson County. | Stone County. |
| Logan County. | Van Buren County. |
| Madison County. | |

§ 81.141 Berkshire Intrastate Air Quality Control Region.

The Berkshire Intrastate Air Quality Control Region (Massachusetts) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Massachusetts:

- Berkshire County.

§ 81.142 Central Massachusetts Intrastate Air Quality Control Region.

The Central Massachusetts Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Massachusetts:

TOWNSHIPS

- | | |
|-------------|------------------|
| Ashburnham. | East Brookfield. |
| Ashby. | Grafton. |
| Athol. | Hardwick. |
| Auburn. | Harvard. |
| Barre. | Holden. |
| Berlin. | Hopedale. |
| Blackstone. | Hubbardston. |
| Boyiston. | Lancaster. |
| Brookfield. | Leicester. |
| Charlton. | Lunenburg. |
| Clinton. | Mendon. |
| Douglas. | Millbury. |
| Dudley. | Millville. |

In the State of Massachusetts—Continued

TOWNSHIPS—Continued

- | | |
|-------------------|------------------|
| New Braintree. | Spencer. |
| Northborough. | Sterling. |
| Northbridge. | Sturbridge. |
| North Brookfield. | Sutton. |
| Oakham. | Templeton. |
| Oxford. | Townsend. |
| Paxton. | Upton. |
| Petersham. | Uxbridge. |
| Phillipston. | Warren. |
| Princeton. | Webster. |
| Royalston. | Westborough. |
| Rutland. | West Boylston. |
| Shirley. | West Brookfield. |
| Shrewsbury. | Westminster. |
| Southbridge. | Winchendon. |

CITIES

- | | |
|------------|-------------|
| Fitchburg. | Leominster. |
| Gardner. | Worcester. |

§ 81.143 Central Virginia Intrastate Air Quality Control Region.

The Central Virginia Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Virginia:

COUNTIES

- | | |
|-------------|----------------|
| Amelia. | Franklin. |
| Amherst. | Halifax. |
| Appomattox. | Henry. |
| Bedford. | Lunenburg. |
| Brunswick. | Mecklenburg. |
| Buckingham. | Nottoway. |
| Campbell. | Patrick. |
| Charlotte. | Pittsylvania. |
| Cumberland. | Prince Edward. |

CITIES

- | | |
|------------|---------------|
| Bedford. | Martinsville. |
| Danville. | South Boston. |
| Lynchburg. | |

TOWNS

- | | |
|-------------|--------------|
| Blackstone. | Rocky Mount. |
| Farmville. | South Hill. |

§ 81.144 Northeastern Virginia Intrastate Air Quality Control Region.

The Northeastern Virginia Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Virginia:

COUNTIES

- | | |
|-----------------|-----------------|
| Accomack. | Louisa. |
| Albermarle. | Madison. |
| Caroline. | Mathews. |
| Culpeper. | Middlesex. |
| Essex. | Nelson. |
| Fauquier. | Northampton. |
| Fluvanna. | Northumberland. |
| Gloucester. | Orange. |
| Greene. | Rappahannock. |
| King and Queen. | Richmond. |
| King George. | Spotsylvania. |
| King William. | Stafford. |
| Lancaster. | Westmoreland. |

In the State of Virginia—Continued

CITIES

- | | |
|------------------|-----------------|
| Charlottesville. | Fredericksburg. |
|------------------|-----------------|

TOWNS

- | | |
|-----------|------------|
| Culpeper. | Warrenton. |
|-----------|------------|

§ 81.145 State Capital Intrastate Air Quality Control Region.

The State Capital Intrastate Air Quality Control Region (Virginia) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Virginia:

COUNTIES

- | | |
|---------------|----------------|
| Charles City. | Henrico. |
| Chesterfield. | New Kent. |
| Dinwiddie. | Powhatan. |
| Goochland. | Prince George. |
| Greensville. | Surry. |
| Hanover. | Sussex. |

CITIES

- | | |
|-------------------|-------------|
| Colonial Heights. | Petersburg. |
| Emporia. | Richmond. |
| Hopewell. | |

§ 81.146 Valley of Virginia Intrastate Air Quality Control Region.

The Valley of Virginia Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Virginia:

COUNTIES

- | | |
|------------|-------------|
| Alleghany. | Highland. |
| Augusta. | Montgomery. |
| Bath. | Page. |
| Botetourt. | Pulaski. |
| Clarke. | Roanoke. |
| Craig. | Rockbridge. |
| Floyd. | Rockingham. |
| Frederick. | Shenandoah. |
| Giles. | Warren. |

CITIES

- | | |
|----------------|-------------|
| Buena Vista. | Roanoke. |
| Clifton Forge. | Salem. |
| Covington. | Staunton. |
| Harrisonburg. | Waynesboro. |
| Lexington. | Winchester. |
| Radford. | |

TOWNS

- | | |
|-----------------|----------|
| Blacksburg. | Luray. |
| Christiansburg. | Pulaski. |
| Front Royal. | Vinton. |

§ 81.147 Eastern Mountain Intrastate Air Quality Control Region.

The Eastern Mountain Intrastate Air Quality Control Region (North Carolina) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of North Carolina:

Alexander County.	McDowell County.
Alleghany County.	Mitchell County.
Ashe County.	Polk County.
Avery County.	Rutherford County.
Burke County.	Watauga County.
Caldwell County.	Wilkes County.
Catawba County.	Yancey County.
Cleveland County.	

§ 81.148 Eastern Piedmont Intrastate Air Quality Control Region.

The Eastern Piedmont Intrastate Air Quality Control Region (North Carolina) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of North Carolina:

Chatham County.	Northampton County.
Durham County.	Orange County.
Edgecombe County.	Person County.
Franklin County.	Vance County.
Granville County.	Wake County.
Halifax County.	Warren County.
Johnston County.	Wilson County.
Lee County.	
Nash County.	

§ 81.149 Northern Coastal Plain Intrastate Air Quality Control Region.

The Northern Coastal Plain Intrastate Air Quality Control Region (North Carolina) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of North Carolina:

Beaufort County.	Hyde County.
Bertie County.	Martin County.
Camden County.	Pasquotank County.
Chowan County.	Perquimans County.
Currituck County.	Pitt County.
Dare County.	Tyrrell County.
Gates County.	Washington County.
Hertford County.	

§ 81.150 Northern Piedmont Intrastate Air Quality Control Region.

The Northern Piedmont Intrastate Air Quality Control Region (North Carolina) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of North Carolina:

Alamance County.	Randolph County.
Caswell County.	Rockingham County.
Davidson County.	Stokes County.
Dayle County.	Surry County.
Forsyth County.	Yadkin County.
Guilford County.	

§ 81.151 Sandhills Intrastate Air Quality Control Region.

The Sandhills Intrastate Air Quality Control Region (North Carolina) consists of the territorial area encompassed by the boundaries of the following juris-

dictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of North Carolina:

Anson County.	Moore County.
Bladen County.	Richmond County.
Cumberland County.	Robeson County.
Harnett County.	Sampson County.
Hoke County.	Scotland County.
Montgomery County.	

§ 81.152 Southern Coastal Plain Intrastate Air Quality Control Region.

The Southern Coastal Plain Intrastate Air Quality Control Region (North Carolina) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of North Carolina:

Brunswick County.	Lenoir County.
Carteret County.	New Hanover County.
Columbus County.	Onslow County.
Craven County.	Pamlico County.
Duplin County.	Pender County.
Greene County.	Wayne County.
Jones County.	

§ 81.153 Western Mountain Intrastate Air Quality Control Region.

The Western Mountain Intrastate Air Quality Control Region (North Carolina) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of North Carolina:

Buncombe County.	Jackson County.
Cherokee County.	Macon County.
Clay County.	Madison County.
Graham County.	Swain County.
Haywood County.	Transylvania County.
Henderson County.	

§ 81.154 Eastern Shore Intrastate Air Quality Control Region.

The Eastern Shore Intrastate Air Quality Control Region (Maryland) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Maryland:

Caroline County.	Somerset County.
Cecil County.	Talbot County.
Dorchester County.	Wicomico County.
Kent County.	Worcester County.
Queen Annes County.	

§ 81.155 Central Maryland Intrastate Air Quality Control Region.

The Central Maryland Intrastate Air Quality Control Region consists of the

territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Maryland:

Frederick County.

§ 81.156 Southern Maryland Intrastate Air Quality Control Region.

The Southern Maryland Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Maryland:

Calvert County.	St. Marys County.
Charles County.	

§ 81.157 North Central Wisconsin Intrastate Air Quality Control Region.

The North Central Wisconsin Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Wisconsin:

Adams County.	Marathon County.
Forest County.	Oneida County.
Florence County.	Portage County.
Juneau County.	Vilas County.
Langlade County.	Wood County.
Lincoln County.	

§ 81.158 Southern Wisconsin Intrastate Air Quality Control Region.

The Southern Wisconsin Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Wisconsin:

Columbia County.	Jefferson County.
Dane County.	Lafayette County.
Dodge County.	Richland County.
Green County.	Sauk County.
Iowa County.	

§ 81.159 Great Basin Valley Intrastate Air Quality Control Region.

The Great Basin Valley Intrastate Air Quality Control Region (California) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of California:

Alpine County. Mono County.
Inyo County.

§ 81.160 North Central Coast Intrastate Air Quality Control Region.

The North Central Coast Intrastate Air Quality Control Region (California) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of California:

Monterey County. Santa Cruz County.
San Benito County.

§ 81.161 North Coast Intrastate Air Quality Control Region.

The North Coast Intrastate Air Quality Control Region (California) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of California:

Del Norte County. Mendocino County.
Humboldt County. Trinity County.
Lake County.

Siskiyou County—that portion of Siskiyou County which lies west of a line described as follows:

Beginning at the Oregon border and running south along the eastern boundary of T. 48 N., R. 8 W. to the northeast corner of T. 47 N., R. 8 W., Humboldt Base and Meridian; then east along the north boundary of T. 47 N., R. 7 W. to the northeast corner of sec. 4, T. 47 N., R. 7 W.; then south along the east boundaries of secs. 4, 9, 16, 21, 28, and 33, T. 47 N., R. 7 W.; then west along the south boundary of T. 47 N., R. 7 W., to the northeast corner of T. 46 N., R. 8 W.; then south along the east boundary of T. 46 N., R. 8 W., to its intersection with the north boundary of T. 45 N., R. 8 W.; then east one-quarter mile to the northeast corner of T. 45 N., R. 8 W.; then south along the east boundary of T. 45 N., R. 8 W., and T. 44 N., R. 8 W., to the northeast corner of sec. 24, T. 44 N., R. 8 W.; then east along the section line to the northeast corner of sec. 20, T. 44 N., R. 7 W.; then south along the eastern boundaries of secs. 20, 29, and 32, T. 44 N., R. 7 W., to the north boundary of T. 43 N., R. 7 W.; then east along the north boundary of T. 43 N., R. 7 W., to the northeast corner of sec. 3, T. 43 N., R. 7 W.; then south along the east boundaries of secs. 3, 10, 15, 22, 27, and 34, T. 43 N., R. 7 W., and continuing south along the east boundaries of secs. 3, 10, 15, 22, 27, and 34, T. 42 N., R. 7 W.; then east to the intersection of the Klamath and Shasta National Forest boundaries; then south along the common boundary of the two National Forests to the Trinity County boundary.

§ 81.162 Northeast Plateau Intrastate Air Quality Control Region.

The Northeast Plateau Intrastate Air Quality Control Region (California) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the

territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of California:

Lassen County. Modoc County.

Shasta County—that portion of Shasta County which lies east and north of a line described as follows:

Beginning at the Shasta-Siskiyou County boundary and running south along the range line common to R. 2 E. and R. 1 E., Mount Diablo Base and Meridian to the southwest corner of T. 53 N., R. 2 E.; then east along the township line common to T. 35 N. and T. 34 N., to the northwest corner of T. 34 N., R. 3 E.; then south along the range line common to R. 3 E. and R. 2 E., to the southwest corner of T. 33 N., R. 3 E.; then east along the township line common to T. 33 N. and T. 32 N., to the northwest corner of T. 32 N., R. 4 E.; then south along the range line common to R. 4 E. and R. 3 E. to the point of intersection with the northwest corner of the Lassen Volcanic National Park boundary; then east along the north boundary of Lassen Volcanic National Park to the point of intersection with the Lassen-Shasta County boundary.

Siskiyou County—that portion of Siskiyou County which lies east of a line described as follows:

Beginning at the Oregon border and running south along the eastern boundary of T. 48 N., R. 8 W., Humboldt Base and Meridian; to the northeast corner of T. 47 N., R. 8 W.; then east along the north boundary of T. 47 N., R. 7 W. to the northeast corner of sec. 4, T. 47 N., R. 7 W.; then south along the east boundaries of secs. 4, 9, 16, 21, 28, and 33, T. 47 N., R. 7 W., then west along the south boundary of T. 47 N., R. 7 W. to the northeast corner of T. 46 N., R. 8 W.; then south along the east boundary of T. 46 N., R. 8 W., to its intersection with the north boundary of T. 45 N., R. 8 W.; then east one-quarter mile to the northeast corner of T. 45 N., R. 8 W.; then south along the east boundary of T. 45 N., R. 8 W., and T. 44 N., R. 8 W., to the northeast corner of sec. 24, T. 44 N., R. 8 W.; then east along the section line to the northeast corner of sec. 20, T. 44 N., R. 7 W.; then south along the eastern boundaries of secs. 20, 29, and 32, T. 44 N., R. 7 W., to the north boundary of T. 43 N., R. 7 W.; then east along the north boundary of T. 43 N., R. 7 W., to the northeast corner of sec. 3, T. 43 N., R. 7 W.; then south along the east boundaries of secs. 3, 10, 15, 22, 27, and 34, T. 43 N., R. 7 W., and continuing south along the east boundaries of secs. 3, 10, 15, 22, 27, and 34, T. 42 N., R. 7 W.; then east to the intersection of the Klamath and Shasta National Forest boundaries; then south along the common boundary of the two National Forests to the Trinity County boundary.

§ 81.163 Sacramento Valley Intrastate Air Quality Control Region.

The Sacramento Valley Intrastate Air Quality Control Region (California) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of California:

Butte County. Sacramento County.
Colusa County. Sierra County.
El Dorado County. Sutter County.
Glenn County. Tehama County.
Nevada County. Yolo County.
Placer County. Yuba County.
Plumas County.

Shasta County—that portion of Shasta County which lies west and south of a line described as follows:

Beginning at the Shasta-Siskiyou County boundary and running south along the range line common to R. 2 E. and R. 1 E., Mount Diablo Base and Meridian to the southwest corner of T. 35 N., R. 2 E.; then east along the township line common to T. 35 N. and T. 34 N., to the northwest corner of T. 34 N., R. 3 E.; then south along the range line common to R. 3 E. and R. 2 E. to the southwest corner of T. 33 N., R. 3 E.; then east along the township line common to T. 33 N. and T. 32 N., to the northwest corner of T. 32 N., R. 4 E.; then south along the range line common to R. 4 E. and R. 3 E. to the point of intersection with the northwest corner of the Lassen Volcanic National Park boundary; then east along the north boundary of Lassen Volcanic National Park to the point of intersection with the Lassen-Shasta County boundary.

§ 81.164 San Diego Intrastate Air Quality Control Region.

The San Diego Intrastate Air Quality Control Region (California) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of California:

San Diego County—that portion of San Diego County which lies west of a line described as follows:

Beginning at the United States-Mexico border and running north along the range line common to R. 7 E., and R. 6 E., San Bernardino Base and Meridian; to the southeast corner of T. 16 S., R. 6 E.; then west along the township line common to T. 16 S. and T. 17 S. to the southwest corner of T. 16 S., R. 6 E.; then north along the range line common to R. 6 E. and R. 5 E. to the southeast corner of T. 14 S., R. 5 E.; then west along the township line common to T. 14 S. and T. 15 S. to the point of intersection with the east boundary of Cuyamaca Park; then north along the east boundary of Cuyamaca Park to the point of intersection with the range line common to R. 5 E. and R. 4 E.; then north along this range line to the point of intersection with the south boundary of the San Felipe Land Grant; then east and north along the land grant boundary to the easternmost corner; then continuing west and north along the land grant boundary to the point of intersection with the range line common to R. 5 E. and R. 4 E.; then north along this range line to the point of intersection with the township line common to T. 10 S. and T. 9 S.; then west along this township line to the point of intersection with the range line common to R. 4 E. and R. 3 E.; then north along this range line to the San Diego-Riverside County boundary.

§ 81.165 San Joaquin Valley Intrastate Air Quality Control Region.

The San Joaquin Valley Intrastate Air Quality Control Region (California) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of California:

Amador County.	Merced County.
Calaveras County.	San Joaquin County.
Fresno County.	Stanislaus County.
Kings County.	Tulare County.
Madera County.	Tuolumne County.
Mariposa County.	

Kern County—that portion of Kern County which lies west and north of a line described as follows:

Beginning at the Kern-Los Angeles County boundary and running north and east along the northwest boundary of the Rancho La Liebre Land Grant to the point of intersection with the range line common to R. 15 W. and R. 16 W., San Bernardino Base and Meridian; north along the range line; then east along the township line common to T. 32 S., Mount Diablo Base and Meridian; and T. 12 N., San Bernardino Base and Meridian; then north along the range line common to R. 34 E. and R. 33 E., Mount Diablo Base and Meridian; then east along the township line common to T. 29 S. and T. 28 S.; then north along the range line common to R. 36 E. and R. 35 E.; then east along the township line common to T. 28 S. and T. 27 S.; then north along the range line common to R. 37 E., and R. 36 E. to the Kern-Tulare County boundary.

§ 81.166 South Central Coast Intrastate Air Quality Control Region.

The South Central Coast Intrastate Air Quality Control Region (California) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of California:

San Luis Obispo County.

Santa Barbara County—that portion of Santa Barbara County which lies north of a line described as follows:

Beginning at the Pacific Ocean outfall of Jalama Creek and running east and north along Jalama Creek to a point of intersection with the west boundary of the San Julian Land Grant; then south along the San Julian Land Grant boundary to its southwest corner; then east along the south boundary of the San Julian Land Grant to the northeast corner of partial sec. 20, T. 5 N., R. 32 W., San Bernardino Base and Meridian; then south and east along the boundary of the Las Cruces Land Grant to the southwest corner of partial sec. 22, T. 5 N., R. 32 W.; then northeast along the Las Cruces Land Grant boundary; then east along the north boundaries of sec. 13, T. 5 N., R. 32 W., and sec. 18, 17, 16, 15, 14, 13, T. 5 N., R. 31 W., and sec. 18, 17, 16, 15, 14, 13, T. 5 N., R. 30 W., and sec. 18, 17, 16, 15, T. 5 N., R. 29 W.; then south along the east boundary of sec. 15 T. 5 N., R. 29 W.; then east along the north

boundaries of sec. 23 and 24, T. 5 N., R. 29 W., and sec. 19, 20, 21, 22, 23, 24, T. 5 N., R. 28 W., and sec. 19 and 20, T. 5 N., R. 27 W.; then south along the east boundary of sec. 20, T. 5 N., R. 27 W.; then east along the north boundaries of sec. 28, 27, 26, 25, T. 5 N., R. 27 W. and sec. 30, T. 5 N., R. 26 W.; then south along the east boundary of sec. 30, T. 5 N., R. 26 W.; then east along the north boundaries of sec. 32, 33, 34, 35, T. 5 N., R. 26 W.; then south along the east boundary of sec. 35, T. 5 N., R. 26 W. to the township line common to T. 4 N. and T. 5 N.; then east along this township line to the Santa Barbara-Ventura County boundary.

§ 81.167 Southeast Desert Intrastate Air Quality Control Region.

The Southeast Desert Intrastate Air Quality Control Region (California) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of California:

Imperial County.

San Diego County—that portion of San Diego County which lies east of a line described as follows:

Beginning at the United States-Mexico border and running north along the range line common to R. 7 E. and R. 6 E. to the southeast corner of T. 16 S., R. 6 E.; then west along the township line, San Bernardino Base and Meridian; common to T. 16 S. and T. 17 S. to the southwest corner of T. 16 S., R. 6 E.; then north along the range line common to R. 6 E. and R. 5 E. to the southeast corner of T. 14 S., R. 5 E.; then west along the township line common to T. 14 S. and T. 15 S. to the point of intersection with the east boundary of Cuyamaca Park; then north along the east boundary of Cuyamaca Park to the point of intersection with the range line common to R. 5 E. and R. 4 E.; then north along this range line to the point of intersection with the south boundary of the San Felipe Land Grant; then east and north along the land grant boundary to the eastern most corner; then continuing west and north along the land grant boundary to the point of intersection with the range line common to R. 5 E. and R. 4 E.; then north along this range line to the point of intersection with the township line common to T. 10 S. and T. 9 S.; then west along this township line to the point of intersection with the range line common to R. 4 E. and R. 3 E.; then north along this range line to the San Diego-Riverside County boundary.

Riverside County—that portion of Riverside County which lies east of a line described as follows:

Beginning at the Riverside-San Diego County boundary and running north along the range line common to R. 4 E. and R. 3 E., San Bernardino Base and Meridian; then east along the township line common to T. 8 S. and T. 7 S.; then north along the range line common to R. 5 E. and R. 4 E.; then west along the township line common to T. 6 S. and T. 7 S. to the southwest corner of sec. 34, T. 6 S., R. 4 E.; then north along the west boundaries of sec. 34, 27, 22, 15, 10, 3, T. 6 S., R. 4 E.; then west along the township line common to T. 5 S. and T. 6 S.; then north along the range line common to R. 4 E. and R. 3 E.; then west along the south boundaries of sec. 13, 14, 15, 16, 17, and 18, T. 5 S., R. 3 E.; then north along the range line common to R. 2 E. and R. 3 E.;

then west along the township line common to T. 4 S. and T. 3 S. to the intersection with the southwest boundary of partial sec. 31, T. 3 S., R. 1 W.; then northwest along the line to the intersection with the range line common to R. 2 W. and R. 1 W.; then north to the Riverside-San Bernardino County line.

San Bernardino County—that portion of San Bernardino County which lies east and north of a line described as follows:

Beginning at the San Bernardino-Riverside County boundary and running north along the range line common to R. 3 E. and R. 2 E., San Bernardino Base and Meridian; then west along the township line common to T. 3 N. and T. 2 N. to the San Bernardino-Los Angeles County boundary.

Los Angeles County—that portion of Los Angeles County which lies north and east of a line described as follows:

Beginning at the Los Angeles-San Bernardino County boundary and running west along the township line common to T. 3 N. and T. 2 N., San Bernardino Base and Meridian; then north along the range line common to R. 8 W. and R. 9 W.; then west along the township line common to T. 4 N. and T. 3 N.; then north along the range line common to R. 12 W. and R. 13 W. to the southeast corner of sec. 12, T. 5 N., R. 13 W.; then west along the south boundaries of sec. 12, 11, 10, 9, 8, 7, T. 5 N., R. 13 W. to the boundary of the Angeles National Forest which is collinear with the range line common to R. 13 W. and R. 14 W.; then north and west along the Angeles National Forest boundary to the point of intersection with the township line common to T. 7 N. and T. 6 N. (point is at the northwest corner of sec. 4 in T. 6 N., R. 14 W.); then west along the township line common to T. 7 N. and T. 6 N.; then north along the range line common to R. 15 W. and R. 16 W. to the southeast corner of sec. 13, T. 7 N., R. 16 W.; then along the south boundaries of sec. 13, 14, 15, 16, 17, 18, T. 7 N., R. 16 W.; then north along the range line common to R. 15 W. and R. 17 W. to the north boundary of the Angeles National Forest (collinear with township line common to T. 8 N. and T. 7 N.) then west and north along the Angeles National Forest boundary to the point of intersection with the south boundary of the Rancho La Liebre Land Grant; then west and north along this land grant boundary to the Los Angeles-Kern County boundary.

Kern County—that portion of Kern County which lies east and south of a line described as follows:

Beginning at the Kern-Los Angeles County boundary and running north and east along the northwest boundary of the Rancho La Liebre Land Grant to the point of intersection with the range line common to R. 15 W. and R. 16 W., San Bernardino Base and Meridian, north along the range line; then east along the township line common to T. 32 S., Mount Diablo Base and Meridian; and T. 12 N., San Bernardino Base and Meridian; then north along the range line common to R. 34 E. and R. 33 E., Mount Diablo Base and Meridian; then east along the township line common to T. 32 S. and T. 31 S.; then north along the range line common to R. 35 E. and R. 34 E.; then east along the township line common to T. 29 S. and T. 28 S.; then north along the range line common to R. 36 E. and R. 35 E.; then east along the township line common to T. 28 S. and T. 27 S.; then north along the range line common to R. 37 E. and R. 36 E. to the Kern-Tulare County boundary.

§ 81.168 Great Falls Intrastate Air Quality Control Region.

The Great Falls Intrastate Air Quality Control Region (Montana) consists of the territorial area encompassed

by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Montana:

Blaine County.	Liberty County.
Cascade County.	Pondera County.
Chouteau County.	Teton County.
Glacier County.	Toole County.
Hill County.	

§ 81.169 Helena Intrastate Air Quality Control Region.

The Helena Intrastate Air Quality Control Region (Montana) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Montana:

Beaverhead County.	Lewis and Clark County.
Broadwater County.	Madison County.
Deer Lodge County.	Meagher County.
Gallatin County.	Park County.
Granite County.	Powell County.
Jefferson County.	Silver Bow County.

§ 81.170 Miles City Intrastate Air Quality Control Region.

The Miles City Intrastate Air Quality Control Region (Montana) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Montana:

Carter County.	Prairie County.
Custer County.	Richland County.
Daniels County.	Roosevelt County.
Dawson County.	Rosebud County.
Fallon County.	Sheridan County.
Garfield County.	Treasure County.
McCone County.	Valley County.
Phillips County.	Wibaux County.
Powder River County.	

§ 81.171 Missoula Intrastate Air Quality Control Region.

The Missoula Intrastate Air Quality Control Region (Montana) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Montana:

Flathead County.	Missoula County.
Lake County.	Ravalli County.
Lincoln County.	Sanders County.
Mineral County.	

§ 81.172 Comanche Intrastate Air Quality Control Region.

The Comanche Intrastate Air Quality Control Region (Colorado) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Colorado:

Baca County.	Kiowa County.
Bent County.	Kit Carson County.
Cheyenne County.	Lincoln County.
Crowley County.	Otero County.
Elbert County.	Prowers County.

§ 81.173 Grand Mesa Intrastate Air Quality Control Region.

The Grand Mesa Intrastate Air Quality Control Region (Colorado) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Colorado:

Delta County.	Montrose County.
Eagle County.	Ourray County.
Garfield County.	Pitkin County.
Gunnison County.	San Miguel County.
Hinsdale County.	Summit County.
Mesa County.	

§ 81.174 Pawnee Intrastate Air Quality Control Region.

The Pawnee Intrastate Air Quality Control Region (Colorado) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Colorado:

Larimer County.	Sedgwick County.
Logan County.	Washington County.
Morgan County.	Weid County.
Phillips County.	Yuma County.

§ 81.175 San Isabel Intrastate Air Quality Control Region.

The San Isabel Intrastate Air Quality Control Region (Colorado) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Colorado:

Chaffee County.	Lake County.
Custer County.	Las Animas County.
El Paso County.	Park County.
Fremont County.	Pueblo County.
Huerfano County.	Teller County.

§ 81.176 San Luis Intrastate Air Quality Control Region.

The San Luis Intrastate Air Quality Control Region (Colorado) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Colorado:

Alamosa County.	Mineral County.
Conejos County.	Rio Grande County.
Costilla County.	Saguache County.

§ 81.177 Yampa Intrastate Air Quality Control Region.

The Yampa Intrastate Air Quality Control Region (Colorado) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Colorado:

Grand County.	Rio Blanco County.
Jackson County.	Routt County.
Moffat County.	

§ 81.178 Southern Delaware Intrastate Air Quality Control Region.

The Southern Delaware Intrastate Air Quality Control Region (Delaware) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described areas (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Delaware:

Kent County.	Sussex County.
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§ 81.179 Aroostook Intrastate Air Quality Control Region.

The Aroostook Intrastate Air Quality Control Region (Maine) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Maine:

Aroostook County—That portion of Aroostook County which lies east of a line described as follows: Beginning at the point where the Maine-Canadian international border is intersected by a line common to the western boundary of Fort Kent Township and running due south to the intersection of said line with the Aroostook-Penobscot County boundary.

§ 81.181 Down East Intrastate Air Quality Control Region.

The Down East Intrastate Air Quality Control Region (Maine) consists of the

territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Maine:

Hancock County. Washington County.

Penobscot County—That portion of Penobscot County which lies south of a line described as follows: Beginning at the point where the Penobscot-Aroostook County boundary is intersected by a line common to the boundaries of Patten and Stacyville Townships and running due west to the intersection of said line with Penobscot-Piscataquis County boundary.

Piscataquis County—That portion of Piscataquis County which lies south and east of a line described as follows: Beginning at the point where the Somerset-Piscataquis County boundary is intersected by a line common to the northern boundary of Blanchard Plantation and running northeast along the northern boundary of Blanchard Plantation to the northeast corner of Blanchard Plantation; then northwest along the western boundary of Monson Township to the northwest corner of Monson Township; then northeast along the northern boundaries of Monson, Willimantic, and Bowerbank Townships, the northern boundary of Barnard Plantation, the northern boundaries of Williamsburg and Brownville Townships, and the northern boundary of Lake View Plantation to the intersection of said line with Piscataquis-Penobscot County boundary, which is also common to the northeast corner of Lake View Plantation.

§ 81.182 Northwest Maine Intrastate Air Quality Control Region.

The Northwest Maine Intrastate Air Quality Control Region (Maine) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Maine:

Aroostook County—That portion of Aroostook County which lies west of a line described as follows: Beginning at the point where the Maine-Canadian international border is intersected by a line common to the western boundary of Fort Kent Township and running due south to the intersection of the said line with the Aroostook-Penobscot County boundary.

Franklin County—That portion of Franklin County which lies north and west of a line described as follows: Beginning at the point where the Oxford-Franklin County boundary is intersected by a line common to the northern boundary of Township No. 6, Phillips Town, Salem Township, and Freeman Township to the intersection of the said line with the Franklin-Somerset County boundary, which is also common to the northeast corner of Freeman Township.

Oxford County—That portion of Oxford County which lies north and west of a line described as follows: Beginning at the point where the Maine-New Hampshire border is intersected by a line common to the northern boundary of Grafton Township, and running northeast along the northern boundaries of Grafton Township and Andover North Sur-

plus to the intersection of said line with the Oxford-Franklin County boundary, which is also the northeast corner of Andover North Surplus.

Penobscot County—That portion of Penobscot County which lies north of a line described as follows: Beginning at the point where the Penobscot-Aroostook County boundary is intersected by a line common to the boundaries of Patten and Stacyville Townships, and running due west to the intersection of said line with the Penobscot-Piscataquis County boundary.

Piscataquis County—That portion of Piscataquis County which lies north and west of a line described as follows: Beginning at the point where the Somerset-Piscataquis County boundary is intersected by a line common to the northern boundary of Blanchard Plantation and running northeast along the northern boundary of Blanchard Plantation to the northeast corner of Blanchard Plantation; then northwest along the western boundary of Monson Township to the northwest corner of Monson Township; then northeast along the northern boundaries of Monson, Willimantic, and Bowerbank Townships, the northern boundary of Barnard Plantation, the northern boundaries of Williamsburg and Brownville Townships, and the northern boundary of Lake View Plantation to the intersection of said line with the Piscataquis-Penobscot County boundary, which is also common to the northeast corner of Lake View Plantation.

Somerset County—That portion of Somerset County which lies north and west of a line described as follows: Beginning at the point where the Somerset-Franklin County boundary is intersected by a line common to the northern boundary of New Portland Township and running northeast along the northern boundaries of New Portland, Embden, Solon, and Athens Townships to the intersection of said line with the Somerset-Piscataquis County boundary, which is common to the northeast corner of Athens Township.

§ 81.183 Eastern Connecticut Intrastate Air Quality Control Region.

The Eastern Connecticut Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Connecticut—Continued

TOWNS

Ashford.	Mansfield.
Bozrah.	Montville.
Brooklyn.	North Stonington.
Canterbury.	Old Lyme.
Chaplin.	Old Saybrook.
Chester.	Plainfield.
Clinton.	Pomfret.
Colchester.	Preston.
Columbia.	Putnam.
Covestry.	Salem.
Deep River.	Scotland.
Eastford.	Sprague.
East Lyme.	Stafford.
Essex.	Sterling.
Franklin.	Stonington.
Griswold.	Thompson.
Groton.	Union.
Hampton.	Voluntown.
Killingly.	Waterford.
Killingworth.	Westbrook.
Lebanon.	Willington.
Ledyard.	Windham.
Lisbon.	Woodstock.
Lyme.	

In the State of Connecticut:

CITIES

Groton.	Putnam.
New London.	Willimantic.
Norwich.	

§ 81.184 Northwestern Connecticut Intrastate Air Quality Control Region.

The Northwestern Connecticut Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Connecticut:

TOWNS

Barkhamsted.	New Hartford.
Bridgewater.	New Milford.
Canaan.	Norfolk.
Colebrook.	North Canaan.
Cornwall.	Roxbury.
Goshen.	Salisbury.
Hartland.	Sharon.
Harwinton.	Sherman.
Kent.	Warren.
Litchfield.	Washington.
Morris.	Winchester.

CITIES

Torrington.	Winsted.
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§ 81.185 Northern Washington Intrastate Air Quality Control Region.

The Northern Washington Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Washington:

Chelan County.	Okanogan County.
Douglas County.	Pend Oreille County.
Ferry County.	Stevens County.

§ 81.187 Olympic-Northwest Washington Intrastate Air Quality Control Region.

The Olympic-Northwest Washington Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Washington:

Clallam County.	Pacific County.
Grays Harbor County.	San Juan County.
Island County.	Skagit County.
Jefferson County.	Thurston County.
Mason County.	Whatcom County.

§ 81.189 South Central Washington Intrastate Air Quality Control Region.

The South Central Washington Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the

territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Washington:

Benton County.	Klickitat County.
Franklin County.	Walla Walla County.
Kittitas County.	Yakima County.

§ 81.190 Eastern Idaho Intrastate Air Quality Control Region.

The Eastern Idaho Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Idaho:

Bannock County.	Franklin County.
Bear Lake County.	Fremont County.
Bingham County.	Jefferson County.
Bonneville County.	Madison County.
Butte County.	Oneida County.
Caribou County.	Power County.
Clark County.	Teton County.

§ 81.191 Appalachian Intrastate Air Quality Control Region.

The Appalachian Intrastate Air Quality Control Region (Kentucky) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Kentucky:

Bell County.	Leslie County.
Breathitt County.	Letcher County.
Clay County.	Magoffin County.
Floyd County.	Martin County.
Harlan County.	Owsley County.
Jackson County.	Perry County.
Johnson County.	Pike County.
Knott County.	Rockcastle County.
Knox County.	Whitley County.
Laurel County.	Wolfe County.
Lee County.	

§ 81.192 Bluegrass Intrastate Air Quality Control Region.

The Bluegrass Intrastate Air Quality Control Region (Kentucky) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Kentucky:

Anderson County.	Jessamine County.
Bourbon County.	Lincoln County.
Boyle County.	Madison County.
Clark County.	Mercer County.
Estill County.	Nicholas County.
Fayette County.	Powell County.
Franklin County.	Scott County.
Garrard County.	Woodford County.
Harrison County.	

§ 81.193 North Central Kentucky Intrastate Air Quality Control Region.

The North Central Kentucky Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Kentucky:

Breckinridge County.	Meade County.
Bullitt County.	Nelson County.
Grayson County.	Oldham County.
Hardin County.	Shelby County.
Henry County.	Spencer County.
Larue County.	Trimble County.
Marion County.	Washington County.

§ 81.194 South Central Kentucky Intrastate Air Quality Control Region.

The South Central Kentucky Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Kentucky:

Adair County.	Logan County.
Allen County.	McCreary County.
Barren County.	Metcalfe County.
Butler County.	Monroe County.
Casey County.	Pulaski County.
Clinton County.	Russell County.
Cumberland County.	Simpson County.
Edmonson County.	Taylor County.
Green County.	Warren County.
Hart County.	Wayne County.

§ 81.195 Central Michigan Intrastate Air Quality Control Region.

The Central Michigan Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Michigan:

Allegan County.	Mecosta County.
Arenac County.	Midland County.
Bay County.	Montcalm County.
Clare County.	Muskegon County.
Genesee County.	Newaygo County.
Gladwin County.	Oceana County.
Gratiot County.	Ogemaw County.
Huron County.	Oseola County.
Ionia County.	Ottawa County.
Iosco County.	Roscommon County.
Isabella County.	Saginaw County.
Kent County.	Sanilac County.
Lake County.	Shiawassee County.
Lapeer County.	Tuscola County.
Mason County.	

§ 81.196 South Central Michigan Intrastate Air Quality Control Region.

The South Central Michigan Intrastate Air Quality Control Region consists

of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the areas so delimited):

In the State of Michigan:

Barry County.	Jackson County.
Branch County.	Kalamazoo County.
Calhoun County.	Lenawee County.
Clinton County.	Livingston County.
Eaton County.	St. Joseph County.
Hillsdale County.	Washtenaw County.
Ingham County.	

§ 81.197 Upper Michigan Intrastate Air Quality Control Region.

The Upper Michigan Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Michigan:

Alcona County.	Kalkaska County.
Alger County.	Keweenaw County.
Alpena County.	Leelanau County.
Antrim County.	Luce County.
Baraga County.	Mackinac County.
Benzie County.	Manistee County.
Cheboygan County.	Marquette County.
Charlevoix County.	Menominee County.
Chippewa County.	Missaukee County.
Crawford County.	Montmorency County.
Delta County.	Ontonagon County.
Dickinson County.	Osceola County.
Emmet County.	Gogebic County.
Gogebic County.	Otsego County.
Grand Traverse County.	Presque Isle County.
Houghton County.	Schoolcraft County.
Iron County.	Wexford County.

§ 81.199 East Alabama Intrastate Air Quality Control Region.

The East Alabama Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Alabama:

Calhoun County.	Coosa County.
Chambers County.	Etowah County.
Cherokee County.	Randolph County.
Clay County.	Talladega County.
Cleburne County.	Tallapoosa County.

§ 81.200 Metropolitan Columbus Intrastate Air Quality Control Region.

The Metropolitan Columbus Intrastate Air Quality Control Region (Ohio) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically

located within the outermost boundaries of the area so delimited):

In the State of Ohio:

Delaware County.	Madison County.
Fairfield County.	Perry County.
Franklin County.	Pickaway County.
Licking County.	Union County.

§ 81.201 Mansfield-Marion Intrastate Air Quality Control Region.

The Mansfield-Marion Intrastate Air Quality Control Region (Ohio) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Ohio:

Ashland County.	Morrow County.
Crawford County.	Richland County.
Holmes County.	Wayne County.
Knox County.	Wyandot County.
Marion County.	

§ 81.202 Northwest Ohio Intrastate Air Quality Control Region.

The Northwest Ohio Intrastate Air Quality Control Region (Ohio) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Ohio:

Allen County.	Logan County.
Auglaize County.	Mercer County.
Champaign County.	Paulding County.
Defiance County.	Putnam County.
Fulton County.	Shelby County.
Hancock County.	Van Wert County.
Hardin County.	Williams County.
Henry County.	

§ 81.203 Sandusky Intrastate Air Quality Control Region.

The Sandusky Intrastate Air Quality Control Region (Ohio) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Ohio:

Erie County.	Sandusky County.
Huron County.	Seneca County.
Ottawa County.	

§ 81.204 Wilmington-Chillicothe-Logan Intrastate Air Quality Control Region.

The Wilmington-Chillicothe-Logan Intrastate Air Quality Control Region (Ohio) consists of the territorial area encompassed by the boundaries of the following jurisdiction or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Ohio:

Clinton County.	Jackson County.
Payette County.	Pike County.
Highland County.	Ross County.
Hocking County.	Vinton County.

§ 81.205 Zanesville-Cambridge Intrastate Air Quality Control Region.

The Zanesville-Cambridge Intrastate Air Quality Control Region (Ohio) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Ohio:

Carroll County.	Muskingum County.
Coshocton County.	Noble County.
Guernsey County.	Tuscarawas County.
Harrison County.	

§ 81.213 Casper Intrastate Air Quality Control Region.

The Casper Intrastate Air Quality Control Region (Wyoming) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Wyoming:

Converse County.	Natrona County.
Freemont County.	

§ 81.214 Black Hills-Rapid City Intrastate Air Quality Control Region.

The Rapid City Intrastate Air Quality Control Region (South Dakota) has been renamed the Black Hills-Rapid City Intrastate Air Quality Control Region (South Dakota) and consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of South Dakota:

Butte County.	Lawrence County.
Custer County.	Meade County.
Fall River County.	Pennington County.

§ 81.215 East Central Indiana Intrastate Air Quality Control Region.

The East Central Indiana Intrastate Air Quality Control Region (Indiana) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Indiana:

Blackford County.	Jay County.
Delaware County.	Madison County.
Grant County.	Randolph County.
Henry County.	Wayne County.

§ 81.216 Northeast Indiana Intrastate Air Quality Control Region.

The Northeast Indiana Intrastate Air Quality Control Region (Indiana) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Indiana:

Adams County.	Noble County.
Allen County.	Steuben County.
De Kalb County.	Wells County.
Huntington County.	Whitley County.
Lagrange County.	

§ 81.217 Southern Indiana Intrastate Air Quality Control Region.

The Southern Indiana Intrastate Air Quality Control Region (Indiana) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Indiana:

Bartholomew County.	Jennings County.
Brown County.	Lawrence County.
Crawford County.	Martin County.
Davless County.	Monroe County.
Decatur County.	Orange County.
Fayette County.	Owen County.
Franklin County.	Ripley County.
Greene County.	Rush County.
Harrison County.	Scott County.
Jackson County.	Switzerland County.
Jefferson County.	Union County.
	Washington County.

§ 81.218 Wabash Valley Intrastate Air Quality Control Region.

The Wabash Valley Intrastate Air Quality Control Region (Indiana) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Indiana:

Benton County.	Parke County.
Carroll County.	Pulaski County.
Cass County.	Putnam County.
Clay County.	Starke County.
Clinton County.	Sullivan County.
Fountain County.	Tippecanoe County.
Fulton County.	Tipton County.
Howard County.	Vermillion County.
Jasper County.	Vigo County.
Knox County.	Wabash County.
Miami County.	Warren County.
Montgomery County.	White County.
Newton County.	

§ 81.219 Central Oregon Intrastate Air Quality Control Region.

The Central Oregon Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as

defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Oregon

Crook County.	Klamath County.
Deschutes County.	Lake County.
Hood River County.	Sherman County.
Jefferson County.	Wasco County.

§ 81.220 Eastern Oregon Intrastate Air Quality Control Region.

The Eastern Oregon Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Oregon

Baker County.	Morrow County.
Gilliam County.	Umatilla County.
Grant County.	Union County.
Harney County.	Wallowa County.
Malheur County.	Wheeler County.

§ 81.221 Southwest Oregon Intrastate Air Quality Control Region.

The Southwest Oregon Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Oregon:

Cook County.	Jackson County.
Curry County.	Josephine County.
Douglas County.	

§ 81.226 Lincoln-Beatrice-Fairbury Intrastate Air Quality Control Region.

The Lincoln-Beatrice-Fairbury Intrastate Air Quality Control Region (Nebraska) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Nebraska:

Gage County.	Lancaster County.
Jefferson County.	Thayer County.

§ 81.230 Allegheny Intrastate Air Quality Control Region.

The Allegheny Intrastate Air Quality Control Region (West Virginia) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of West Virginia:

Greenbrier County.	Pocahontas County.
Hampshire County.	Randolph County.
Hardy County.	Summers County.
Monroe County.	Tucker County.
Pendleton County.	

In Grant County:

Grant Magisterial District.	Milroy Magisterial District.
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In Mineral County:

Cabin Run Magisterial District.	Welton Magisterial District.
Frankfort Magisterial District.	

§ 81.231 Central West Virginia Intrastate Air Quality Control Region.

The Central West Virginia Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of West Virginia:

Braxton County.	Nicholas County.
Calhoun County.	Ritchie County.
Clay County.	Roane County.
Doddridge County.	Upshur County.
Gilmer County.	Webster County.
Lewis County.	Wirt County.

§ 81.232 Eastern Panhandle Intrastate Air Quality Control Region.

The Eastern Panhandle Intrastate Air Quality Control Region (West Virginia) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of West Virginia:

Berkeley County.	Morgan County.
Jefferson County.	

§ 81.233 Kanawha Valley Intrastate Air Quality Control Region.

The Kanawha Valley Intrastate Air Quality Control Region (West Virginia) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of West Virginia:

Kanawha County.	Putnam County.
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In Fayette County:

Falls Magisterial District.	Kanawha Magisterial District.
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§ 81.234 North Central West Virginia Intrastate Air Quality Control Region.

The North Central West Virginia Intrastate Air Quality Control Region con-

sists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of West Virginia:

Barbour County.	Monongalia County.
Harrison County.	Preston County.
Marion County.	Taylor County.

§ 81.235 Southern West Virginia Intrastate Air Quality Control Region.

The Southern West Virginia Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of West Virginia:

Boone County.	Mercer County.
Lincoln County.	Mingo County.
Logan County.	Raleigh County.
McDowell County.	Wyoming County.

In Fayette County:

Fayetteville Magisterial District.	Quinnimont Magisterial District.
Mountain Cove Magisterial District.	Sewell Mountain Magisterial District.
Nuttall Magisterial District.	

§ 81.236 Central Georgia Intrastate Air Quality Control Region.

The Central Georgia Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Georgia:

Baldwin County.	Monroe County.
Ben Hill County.	Montgomery County.
Bibb County.	Peach County.
Bleckley County.	Pulaski County.
Crawford County.	Putnam County.
Dodge County.	Telfair County.
Hancock County.	Toombs County.
Houston County.	Treutlen County.
Jasper County.	Twiggs County.
Jeff Davis County.	Washington County.
Johnson County.	Wheeler County.
Jones County.	Wilcox County.
Laurens County.	Wilkinson County.
Macon County.	

§ 81.237 Northeast Georgia Intrastate Air Quality Control Region.

The Northeast Georgia Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically

located within the outermost boundaries of the area so delimited):

In the State of Georgia:

Banks County.	Lumpkin County.
Barrow County.	Madison County.
Clarke County.	Morgan County.
Dawson County.	Newton County.
Elbert County.	Oconee County.
Forsyth County.	Oglethorpe County.
Franklin County.	Rabun County.
Greene County.	Stephens County.
Habersham County.	Towns County.
Hall County.	Union County.
Hart County.	Walton County.
Jackson County.	White County.

§ 81.233 Southwest Georgia Intrastate Air Quality Control Region.

The Southwest Georgia Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Georgia:

Baker County.	Irwin County.
Berrien County.	Lanier County.
Brooks County.	Lee County.
Calhoun County.	Lowndes County.
Clay County.	Miller County.
Colquitt County.	Mitchell County.
Cook County.	Randolph County.
Crisp County.	Seminole County.
Decatur County.	Terrell County.
Dougherty County.	Thomas County.
Early County.	Tift County.
Echols County.	Turner County.
Grady County.	Worth County.

§ 81.239 Upper Rio Grande Valley Intrastate Air Quality Control Region.

The Upper Rio Grande Valley Intrastate Air Quality Control Region (New Mexico) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of New Mexico:

Los Alamos County. Taos County.
Santa Fe County.

Those portions of Rio Arriba County lying east of the Continental Divide.

§ 81.240 Northeastern Plains Intrastate Air Quality Control Region.

The Northeastern Plains Intrastate Air Quality Control Region (New Mexico) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of New Mexico:

Colfax County.	San Miguel County.
Guadalupe County.	Torrance County.
Harding County.	Union County.
Mora County.	

§ 81.241 Southwestern Mountains-Augustine Plains Intrastate Air Quality Control Region.

The Southwestern Mountains-Augustine Plains Intrastate Air Quality Control Region (New Mexico) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of New Mexico:

Catron County. Socorro County.

Those portions of McKinley County lying east of the Continental Divide.

Those portions of Valencia County, excluding the Zuni and Ramah Navajo Indian Reservations, lying west of a line described as follows: Starting at the point at which the south boundary of Bernalillo County intersects with the section line between secs. 1 and 2 T. 7 N., R. 2 W.; thence south to the southern boundary of the Laguna Indian Reservation between secs. 35 and 36 T. 7 N., R. 2 W.; then southerly on section lines to the Socorro-Valencia County line at secs. 11, 12, 13, and 14, T. 5 N., R. 2 W.

§ 81.242 Pecos-Permian Basin Intrastate Air Quality Control Region.

The Pecos-Permian Basin Intrastate Air Quality Control Region (New Mexico) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of New Mexico:

Chaves County.	Lea County.
Curry County.	Quay County.
De Baca County.	Roosevelt County.
Eddy County.	

§ 81.243 Central Minnesota Intrastate Air Quality Control Region.

The Central Minnesota Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Minnesota:

Benton County.	Pine County.
Chisago County.	Sherburne County.
Isanti County.	Stearns County.
Kanabec County.	Wright County.
Mille Lacs County.	

§ 81.244 Northwest Minnesota Intrastate Air Quality Control Region.

The Northwest Minnesota Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geograph-

ically located within the outermost boundaries of the area so delimited):

In the State of Minnesota:

Becker County.	Morrison County.
Beltrami County.	Norman County.
Cass County.	Otter Tail County.
Clearwater County.	Pennington County.
Crow Wing County.	Polk County.
Douglas County.	Pope County.
Grant County.	Red Lake County.
Hubbard County.	Roseau County.
Kittson County.	Stevens County.
Lake of the Woods County.	Todd County.
Mahnomen County.	Traverse County.
Marshall County.	Wadena County.
	Wilkin County.

§ 81.245 Southwest Minnesota Intrastate Air Quality Control Region.

The Southwest Minnesota Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Minnesota:

Big Stone County.	Meeker County.
Chippewa County.	Murray County.
Cottonwood County.	Nobles County.
Jackson County.	Pipestone County.
Kandiyohi County.	Redwood County.
Lac qui Parle County.	Renville County.
Lincoln County.	Rock County.
Lyon County.	Swift County.
McLeod County.	Yellow Medicine County.

§ 81.246 Northern Alaska Intrastate Air Quality Control Region.

The Northern Alaska Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Alaska:

Those portions of the 1956 Election Districts 18-23, inclusive, as described in Article XIV, § 3 of the Constitution of the State of Alaska, which are not included in the designated Cook Inlet Intrastate Air Quality Control Region as designated August 12, 1970 (35 P.R. 12757).

§ 81.247 South Central Alaska Intrastate Air Quality Control Region.

The South Central Alaska Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Alaska:

Those portions of the 1956 Election Districts 7-17, inclusive, and Election District 24 as described in Article XIV, Section 3 of the Constitution of the State of Alaska, which are not included in the designated Cook

Inlet Intrastate Air Quality Control Region as designated August 12, 1970 (35 F.R. 12757).

§ 81.248 Southeastern Alaska Intrastate Air Quality Control Region.

The Southeastern Alaska Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Alaska:
1956 Election Districts 1-6, inclusive, as described in Article XIV, Section 3 of the Constitution of the State of Alaska.

§ 81.249 Northwest Oregon Intrastate Air Quality Control Region.

The Northwest Oregon Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Oregon:
Clatsop County. Tillamook County.
Lincoln County.

§ 81.250 North Central Kansas Intrastate Air Quality Control Region.

The North Central Kansas Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Kansas:
Clay County. Mitchell County.
Cloud County. Morris County.
Dickinson County. Ottawa County.
Ellsworth County. Republic County.
Geary County. Rice County.
Jewell County. Riley County.
Lincoln County. Saline County.
McPherson County. Washington County.

§ 81.251 Northeast Kansas Intrastate Air Quality Control Region.

The Northeast Kansas Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Kansas:
Atchison County. Miami County.
Brown County. Nemaha County.
Doniphan County. Osage County.
Douglas County. Pottawatomie County.
Franklin County. Shawnee County.
Jackson County. Wabauisee County.
Jefferson County.
Marshall County.

§ 81.252 Northwest Kansas Intrastate Air Quality Control Region.

The Northwest Kansas Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Kansas:
Barton County. Rawlins County.
Cheyenne County. Rooks County.
Decatur County. Rush County.
Ellis County. Russell County.
Gove County. Sheridan County.
Graham County. Sherman County.
Logan County. Smith County.
Ness County. Thomas County.
Norton County. Trego County.
Osborne County. Wallace County.
Phillips County.

§ 81.253 South Central Kansas Intrastate Air Quality Control Region.

The South Central Kansas Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Kansas:
Butler County. Kingman County.
Chase County. Marion County.
Cowley County. Reno County.
Harper County. Sedgwick County.
Harvey County. Sumner County.

§ 81.254 Southeast Kansas Intrastate Air Quality Control Region.

The Southeast Kansas Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Kansas:
Allen County. Greenwood County.
Anderson County. Labette County.
Bourbon County. Linn County.
Chautauqua County. Lyon County.
Cherokee County. Montgomery County.
Coffey County. Neosho County.
Crawford County. Wilson County.
Elk County. Woodson County.

§ 81.255 Southwest Kansas Intrastate Air Quality Control Region.

The Southwest Kansas Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Kansas:
Barber County. Kiowa County.
Clark County. Lane County.
Comanche County. Meade County.
Edwards County. Morton County.
Finney County. Pawnee County.
Ford County. Pratt County.
Grant County. Scott County.
Gray County. Seward County.
Greeley County. Stafford County.
Hamilton County. Stanton County.
Haskell County. Stevens County.
Hodgeman County. Wichita County.
Kearny County.

§ 81.256 Northeast Iowa Intrastate Air Quality Control Region.

The Northeast Iowa Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Iowa:
Allamakee County. Delaware County.
Benton County. Fayette County.
Black Hawk County. Howard County.
Bremer County. Jones County.
Buchanan County. Linn County.
Chickasaw County. Winneshek County.

§ 81.257 North Central Iowa Intrastate Air Quality Control Region.

The North Central Iowa Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Iowa:
Butler County. Humboldt County.
Cerro Gordo County. Kossuth County.
Floyd County. Mitchell County.
Franklin County. Webster County.
Grundy County. Winnebago County.
Hamilton County. Worth County.
Hancock County. Wright County.
Hardin County.

§ 81.258 Northwest Iowa Intrastate Air Quality Control Region.

The Northwest Iowa Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Iowa:

Buena Vista County. Ida County.
Calhoun County. O'Brien County.
Cherokee County. Osceola County.
Clay County. Palo Alto County.
Dickinson County. Pocahontas County.
Emmet County. Sac County.

§ 81.259 Southwest Iowa Intrastate Air Quality Control Region.

The Southwest Iowa Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Iowa:

Adair County. Harrison County.
Adams County. Mills County.
Audubon County. Monona County.
Carroll County. Montgomery County.
Cass County. Page County.
Crawford County. Ringgold County.
Fremont County. Shelby County.
Greene County. Taylor County.
Guthrie County. Union County.

§ 81.260 South Central Iowa Intrastate Air Quality Control Region.

The South Central Iowa Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Iowa:

Appanoose County. Marion County.
Boone County. Marshall County.
Clarke County. Monroe County.
Dallas County. Polk County.
Decatur County. Poweshiek County.
Jasper County. Story County.
Lucas County. Tama County.
Madison County. Warren County.
Mahaska County. Wayne County.

§ 81.261 Southeast Iowa Intrastate Air Quality Control Region.

The Southeast Iowa Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Iowa:

Cedar County. Johnson County.
Davis County. Keokuk County.
Henry County. Van Buren County.
Iowa County. Wapello County.
Jefferson County. Washington County.

NOTE: For purposes of identification, the Regions are referred to by Iowa authorities as follows:

Sec.
81.256 Northeast Iowa Intrastate Air Quality Control Region: Region 1.

Sec.

81.257 North Central Iowa Intrastate Air Quality Control Region: Region 2.
81.258 Northwest Iowa Intrastate Air Quality Control Region: Region 3.
81.259 Southwest Iowa Intrastate Air Quality Control Region: Region 4.
81.260 South Central Iowa Intrastate Air Quality Control Region: Region 5.
81.261 Southeast Iowa Intrastate Air Quality Control Region: Region 6.

§ 81.262 North Central Illinois Intrastate Air Quality Control Region.

The North Central Illinois Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Illinois:

Bureau County. Marshall County.
La Salle County. Putnam County.
Lee County. Stark County.

§ 81.263 East Central Illinois Intrastate Air Quality Control Region.

The East Central Illinois Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Illinois:

Champaign County. Iroquois County.
Clark County. Livingston County.
Coles County. McLean County.
Cumberland County. Moultrie County.
De Witt County. Piatt County.
Douglas County. Shelby County.
Edgar County. Vermillion County.
Ford County.

§ 81.264 West Central Illinois Intrastate Air Quality Control Region.

The West Central Illinois Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Illinois:

Adams County. Macoupin County.
Brown County. Menard County.
Calhoun County. Montgomery County.
Cass County. Morgan County.
Christian County. Pike County.
Greene County. Sangamon County.
Jersey County. Schuyler County.
Logan County. Scott County.
Macon County.

§ 81.265 Southeast Illinois Intrastate Air Quality Control Region.

The Southeast Illinois Intrastate Air Quality Control Region consists of the territorial area encompassed by the

boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Illinois:

Clay County. Jefferson County.
Crawford County. Lawrence County.
Edwards County. Marion County.
Elliott County. Perry County.
Payette County. Richland County.
Franklin County. Saline County.
Gallatin County. Wabash County.
Hamilton County. Wayne County.
Hardin County. White County.
Jackson County. Williamson County.
Jasper County.

§ 81.266 Alabama and Tombigbee Rivers Intrastate Air Quality Control Region.

The Alabama and Tombigbee Rivers Intrastate Air Quality Control Region (Alabama) consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Alabama:

Choctaw County. Monroe County.
Clarke County. Perry County.
Conecuh County. Washington County.
Dallas County. Wilcox County.
Marengo County.

§ 81.267 Southeast Alabama Intrastate Air Quality Control Region.

The Southeast Alabama Intrastate Air Quality Control Region consists of the territorial area encompassed by the boundaries of the following jurisdictions or described area (including the territorial area of all municipalities (as defined in section 302(f) of the Clean Air Act, 42 U.S.C. 1857h(f)) geographically located within the outermost boundaries of the area so delimited):

In the State of Alabama:

Barbour County. Geneva County.
Coffee County. Henry County.
Covington County. Houston County.
Dale County.

PART 85—CONTROL OF AIR POLLUTION FROM NEW MOTOR VEHICLES AND NEW MOTOR VEHICLE ENGINES

Subpart A—General Provisions

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Appendix B—Procedure for Dynamometer Road Horsepower Calibration.

Appendix C—Constant Volume Sampler Flow Calibration.

Appendix D—Durability Driving Schedule.

Appendix E—Oxides of Nitrogen Analytical System.

Appendix F—Vehicle and Engine Components.

AUTHORITY: The provisions of this Part 85 issued under U.S.C. 1857g(a), as amended by sec. 15(c) (2), Pub. L. 91-604, 84 Stat. 1713.

Subpart A—General Provisions

§ 85.1 Definitions.

(a) As used in this part, all terms not defined herein shall have the meaning given them in the Act:

(1) "Act" means Part A of Title II of the Clean Air Act, 42 U.S.C. 1857 f-1 through f-7, as amended by Public Law 91-604.

(2) "Administrator" means the Administrator of the Environmental Protection Agency or his authorized representative.

(3) "Model year" means the manufacturer's annual production period (as determined by the Administrator) which includes January 1 of such calendar year: *Provided*, That if the manufacturer has no annual production period, the term "model year" shall mean the calendar year.

(4) "Gross vehicle weight" means the manufacturer's gross weight rating for the individual vehicle.

(5) "Light duty vehicle" means any motor vehicle either designed primarily for transportation of property and rated at 6,000 pounds GVW or less or designed primarily for transportation of persons and having a capacity of 12 persons or less.

(6) "Heavy duty vehicle" means any motor vehicle either designed primarily for transportation of property and rated at more than 6,000 pounds GVW or designed primarily for transportation of persons and having a capacity of more than 12 persons.

(7) "Heavy duty engine" means any engine which the engine manufacturer could reasonably expect to be used for motive power in a heavy duty vehicle.

(8) "Off-road utility vehicle" means a light duty vehicle which incorporates special features for off-road operation such as four-wheel drive.

(9) "Motorcycle" means any light duty vehicle having a seat or saddle for the use of the rider and designed to travel on not more than three wheels (including any tricycle arrangement) in contact with the ground and weighing less than 1,500 pounds.

(10) "Vehicle curb weight" means the actual or the manufacturer's estimated weight of the vehicle in operational status with all standard equipment, and weight of fuel at nominal tank capacity, and the weight of optional equipment computed in accordance with § 85.89(g).

(11) "Loaded vehicle weight" means the vehicle curb weight of a light duty vehicle plus 300 pounds.

(12) "System" includes any motor vehicle engine modification which controls or causes the reduction of substances emitted from motor vehicles or motor vehicle engines.

(13) "Engine family" means the basic classification unit of a manufacturer's product line used for the purpose of test fleet selection and determined in accordance with § 85.89(a).

(14) "Engine-system combination" means an engine family-exhaust emission control system-fuel evaporative emission control system (where applicable) combination.

(15) "Fuel system" means the combination of fuel tank, fuel pump, fuel lines, and carburetor, or fuel injection components, and includes all fuel system

vents and fuel evaporative emission control systems.

(16) "Crankcase emissions" means airborne substances emitted to the atmosphere from any portion of the engine crankcase ventilation or lubrication systems.

(17) "Exhaust emissions" means substances emitted to the atmosphere from any opening downstream from the exhaust port of a motor vehicle engine.

(18) "Fuel evaporative emissions" means vaporized fuel emitted into the atmosphere from the fuel system of a motor vehicle.

(19) "Smoke" means the matter in exhaust emissions which obscures the transmission of light.

(20) "Hot soak loss" means fuel evaporative emissions during the 1-hour hot soak period which begins immediately after the engine is turned off.

(21) "Diurnal breathing loss" means fuel evaporative emissions as a result of the daily range in temperature to which the fuel system is exposed.

(22) "Running loss" means fuel evaporative emissions resulting from an average trip in an urban area or the simulation of such a trip.

(23) "Tank fuel volume" means the volume of fuel in the fuel tank, prescribed to be 40 percent of nominal tank capacity rounded to the nearest whole U.S. gallon.

(24) "Maximum rated horsepower" means the maximum brake horsepower output of an engine as stated by the manufacturer in his sales and service literature and his application for certification under § 85.51.

(25) "Rated speed" means the speed at which the manufacturer specifies the maximum rated horsepower of an engine.

(26) "Maximum rated torque" means the maximum torque produced by an engine as stated by the manufacturer in his sales and service literature and his application for certification under § 85.51.

(27) "Opacity" means the fraction of a beam of light, expressed in percent, which fails to penetrate a plume of smoke.

(28) Zero (0) miles means that point after initial engine starting (not to exceed 10 miles of vehicle operation) at which adjustments are completed.

(29) Zero (0) hours means that point after initial engine starting (not to exceed 1 hour of engine operation) at which adjustments are completed.

(30) "Calibrating gas" means a gas of known concentration which is used to establish the response curve of an analyzer.

(31) "Span gas" means a gas of known concentration which is used routinely to set the output level of an analyzer.

(32) "Oxides of Nitrogen" means the sum of the nitric oxide and nitrogen dioxide contained in a gas sample as if the nitric oxide were in the form of nitrogen dioxide.

(33) "Useful life" means:

(i) In the case of light duty vehicles, a period of use of 5 years or 50,000 miles, whichever first occurs;

(ii) In the case of gasoline fueled heavy duty engines, a period of use of 5 years or of 50,000 miles of vehicle operation (or an equivalent period of 1,500 hours of dynamometer operation), whichever first occurs;

(iii) In the case of heavy duty diesel engines, a period of use of 5 years or of 100,000 miles of vehicle operation (or an equivalent period of 1,000 hours of dynamometer operation), whichever first occurs.

§ 85.2 Abbreviations.

The abbreviations used in this part have the following meanings in both capital and lower case:

Accel.—Acceleration.
 ASTM—American Society for Testing and Materials.
 BHP—Brake Horsepower.
 C.—Centigrade.
 C.f.h.—Cubic feet per hour.
 CO₂—Carbon Dioxide.
 CO—Carbon Monoxide.
 Conc.—Concentration.
 CT—Closed Throttle.
 C.f.m.—Cubic feet per minute.
 Cu.in.—Cubic inch (es).
 Decel.—Deceleration.
 EP—End Point.
 Evap.—Evaporated.
 F.—Fahrenheit.
 FL—Full Load.
 Gal.—U.S. Gallon(s).
 Gm.—Gram(s).
 GVW—Gross Vehicle Weight.
 HC—Hydrocarbon(s).
 Hg—Mercury.
 HI.—High.
 HP.—Horsepower.
 IBP—Initial Boiling Point.
 ID—Internal Diameter.
 Lb.—Pound(s).
 Lb.-ft.—Pound-feet.
 Max.—Maximum.
 Min.—Minimum; also minute(s).
 Ml.—Milliliter(s).
 M.p.h.—Miles per hour.
 Mm.—Millimeter(s).
 Mv.—Millivolt(s).
 N₂—Nitrogen.
 NO—Nitric Oxide.
 NO₂—Nitrogen Dioxide.
 NO_x—Oxides of Nitrogen.
 No.—Number.
 Pb.—Lead.
 P.p.m.—Parts per million by volume.
 P.s.i.—Pounds per square inch.
 P.s.i.g.—Pounds per square inch gauge.
 PTA—Parts Throttle Accel.
 PTD—Part Throttle Decel.
 R.—Rankine.
 R.p.m.—Revolutions per minute.
 RS—Rated Speed.
 RVP—Reid Vapor Pressure.
 S.A.E.—Society of Automotive Engineers.
 Sec.—Second(s).
 Sp.—Speed.
 SS—Stainless Steel.
 T.—Torque.
 TEL—Tetraethyl Lead.
 TML—Tetramethyl Lead.
 V.—Volts.
 Vs.—Versus.
 WOT—Wide Open Throttle.
 Wt.—Weight.
 '—Feet.
 '—Inches.
 °—Degrees.
 %—Percent.

§ 85.3 General standards: increase in emissions; unsafe conditions.

(a) (1) Every new motor vehicle or new motor vehicle engine manufactured for sale, sold, offered for sale, introduced or delivered for introduction into commerce, or imported into the United States for sale or resale which is subject to any of the standards prescribed in this part shall be covered by a certificate of conformity issued pursuant to Subpart F of this part.

(2) No heavy duty vehicle manufacturer shall take any of the actions specified in section 203(a) (1) of the Act with respect to any gasoline fueled or diesel powered heavy duty vehicle which uses an engine which has not been certified as meeting applicable standards. Such manufacturer shall provide to the Administrator prior to the beginning of each model year a statement signed by an authorized representative which includes the following information:

(i) A description of the vehicles which will be produced subject to this section;

(ii) Identification of the engines used in the vehicles;

(iii) Projected sales data on each vehicle-engine combination;

(iv) A statement that the engines will not be modified by the vehicle manufacturer or a detailed specification of any changes which will be made. Changes made solely for the purpose of mounting an engine in a vehicle need not be included.

(b) (1) Any system installed on or incorporated in a new motor vehicle or new motor vehicle engine to enable such vehicle to conform to standards imposed by this part:

(i) Shall not in its operation or function cause the emission into the ambient air of any noxious or toxic substance that would not be emitted in the operation of such vehicle or engine without such system, except as specifically permitted by regulation; and

(ii) Shall not in its operation, function, or malfunction result in any unsafe condition endangering the motor vehicle, its occupants, or persons or property in close proximity to the vehicle.

(2) Every manufacturer of new motor vehicles or new motor vehicle engines subject to any of the standards imposed by this part shall, prior to taking any of the actions specified in section 203(a) (1) of the Act, test or cause to be tested motor vehicles or motor vehicle engines in accordance with good engineering practice to ascertain that such test vehicles or engines will meet the requirements of this section for the useful life of the vehicle or engine.

§ 85.4 Labeling.

(a) (1) The manufacturer of any light duty motor vehicle subject to any of the standards prescribed in this part shall, at the time of manufacture, affix a permanent, legible label, of the type and in the manner described below, containing the information hereinafter provided, to all production models of such vehicles

available for sale to the public and covered by a certificate of conformity under § 85.55(a).

(2) A plastic or metal label shall be welded, riveted, or otherwise permanently attached in a readily visible position in the engine compartment.

(3) The label shall be affixed by the vehicle manufacturer, who has been issued the certificate of conformity for such vehicle, in such a manner that it cannot be removed without destroying or defacing the label, and shall not be affixed to any equipment which is easily detached from such vehicle.

(4) The label shall contain the following information lettered in the English language in block letters and numerals, which shall be of a color that contrasts with the background of the label:

(i) The label heading: Vehicle Emission Control Information;

(ii) Full corporate name and trademark of manufacturer;

(iii) Engine displacement (in cubic inches) and engine family identification;

(iv) Engine tuneup specifications and adjustments, as recommended by the manufacturer, including idle speed, ignition timing, and the idle air-fuel mixture setting procedure and valve (e.g. idle CO, idle air-fuel ratio, idle speed drop). These specifications should indicate the proper transmission position during tuneup and what accessories (e.g., air-conditioner), if any, should be in operation;

(v) The statement: "This Vehicle Conforms to U.S.E.P.A. Regulations Applicable to (insert current year) Model Year New Motor Vehicles."

(b) The manufacturer of any heavy duty gasoline fueled engine shall, at the time of manufacture, affix a permanent, legible plastic or metal label, containing the information hereinafter provided to all production models of such engines available for sale to the public, and covered by a certificate of conformity under § 85.55(a). The label shall be affixed at such a location that it will be readily accessible for inspection after the engine is installed in a vehicle and shall read as follows:

ENGINE EMISSION CERTIFICATION

This engine is, in all material respects, of substantially the same construction as test engines certified by the U.S. Environmental Protection Agency as conforming to Federal regulations pertaining to crankcase and exhaust emissions.

Engine family identification and engine displacement (in cubic inches) -----

Date of manufacture -----
(Month and year)

Name of manufacturer -----
(The information applicable to each engine is to be inserted on the appropriate line.)

(c) The manufacturer of any heavy duty diesel engine shall, at the time of manufacture, affix a permanent, legible plastic or metal label containing the information hereinafter provided to all production models of such engines available for sale to the public, and covered by a certificate of conformity under § 85.55(a). The label shall be affixed at

such a location that it will be readily accessible for inspection after the engine is installed in a vehicle and shall read as follows:

ENGINE SMOKE EMISSION CERTIFICATION

This engine is, in all material respects, or substantially the same construction as test engines certified by the U.S. Environmental Protection Agency as conforming to Federal regulations pertaining to exhaust smoke emission.

Engine family identification and model -----

Date of manufacture -----
(Month and year)

Name of manufacturer -----
(The information applicable to each engine is to be inserted on the appropriate line.)

(d) The provisions of this section shall not prevent a manufacturer from also reciting on the label that such vehicle or engine conforms to any applicable State emission standards for new motor vehicles or new motor vehicle engines or any other information that such manufacturer deems necessary for, or useful to, the proper operation and satisfactory maintenance of the vehicle or engine.

§ 85.5 Submission of vehicle identification numbers.

(a) The manufacturer of any light duty motor vehicle covered by a certificate of conformity under § 85.55(a) shall, not later than 60 days after its manufacture, submit to the Administrator the vehicle identification number of such vehicle: *Provided*, That this requirement shall not apply with respect to any vehicle manufactured within any State, as defined in section 302(d) of the Act.

(b) The requirements of this section may be waived with respect to any manufacturer who provides information satisfactory to the Administrator which will enable the Administrator to identify those vehicles or engines which are covered by a certificate of conformity.

§ 85.6 Production vehicles and engines.

(a) Any manufacturer obtaining certification under this part shall supply to the Administrator, upon his request, a reasonable number of production vehicles or engines selected by the Administrator which are representative of the engines, emission control systems, fuel systems, and transmissions offered and typical of production models available for sale under the certificate. These vehicles or engines shall be supplied for testing at such time and place and for such reasonable periods as the Administrator may require. Engines supplied under this paragraph may be required to be mounted in chassis and appropriately equipped for operation on a chassis dynamometer.

(b) Any manufacturer obtaining certification under this part shall notify the Administrator, on a quarterly basis, of the number of vehicles of each engine family-engine displacement-exhaust emission control system-fuel system-transmission type-inertia weight class combination or the number of engines of each engine family-engine displacement-exhaust emission control system-fuel

system combination produced for sale in the United States during the preceding quarter. A manufacturer may elect to provide this information every 60 days instead of quarterly, to combine it with the notification required under § 85.5.

(c) All light duty vehicles covered by a certificate of conformity under § 85.55(a) shall be adjusted by the manufacturer to the ignition timing specification detailed in § 85.4(a)(4)(iv).

§ 85.7 Emission control system operation during test.

All emission control systems installed on or incorporated in a new motor vehicle or new motor vehicle engine shall be functioning during all test procedures in this part.

§ 85.8 Special test procedures.

The Administrator may, on the basis of a written application therefor by a manufacturer, prescribe test procedures, other than those set forth in this part, for any motor vehicle or motor vehicle engine which he determines is not susceptible to satisfactory testing by the procedures set forth herein.

§ 85.9 Maintenance of records; submittal of information; right of entry.

(a) The manufacturer of any new motor vehicle or new motor vehicle engine subject to any of the standards prescribed in this part shall establish and maintain the following adequately organized and indexed records:

(1) Identification and description of all vehicles or engines for which testing is required under this part.

(2) A description of all emission control systems which are installed on or incorporated in each vehicle or engine.

(3) A description of the procedures used to test such vehicles or engines.

(4) Test data on each emission data vehicle or engine which will show its emissions at 0 and 4,000 miles or 0 and 125 hours, respectively.

(5) Test data on each durability vehicle or engine which will show the performance of the systems installed on or incorporated in the vehicle or engine during extended mileage or operation, as well as a record of all pertinent maintenance performed on the vehicle or engine.

(b) The manufacturer of any new motor vehicle or new motor vehicle engine subject to any of the standards prescribed in this part shall submit to the Administrator at the time of issuance by the manufacturer copies of all instructions or explanations regarding the use, repair, adjustment, maintenance, or testing of such vehicle or engine relevant to the control of crankcase, exhaust, or evaporative emissions, issued by the manufacturer for use by other manufacturers, assembly plants, distributors, dealers, and ultimate purchasers: *Provided*, That any material not translated into the English language need not be submitted unless specifically requested by the Administrator.

(c) The manufacturer of any new motor vehicle or new motor vehicle engine subject to any of the standards prescribed in this part shall permit officers or employees duly designated by the Administrator, upon presenting appropriate credentials and a written notice to the manufacturer:

(1) To enter, at reasonable times, any premises used during the certification procedure for purposes of monitoring tests and mileage accumulation procedures, observing maintenance procedures, and verifying correlation or calibration of test equipment, or

(2) To inspect, at reasonable times, records, files, and papers compiled by such manufacturer in accordance with paragraph (a) of this section.

A separate notice shall be given for each such inspection, but a separate notice shall not be required for each entry made during the period covered by the inspection. Each such inspection shall be commenced and completed with reasonable promptness.

Subpart B—Crankcase Emissions (Gasoline Fueled Vehicles and Engines)

§ 85.10 Applicability.

The provisions of this subpart are applicable to all new gasoline fueled light duty vehicles, except motorcycles, and heavy duty engines beginning with the 1972 model year for such vehicles and engines.

§ 85.11 Standards for crankcase emissions.

No crankcase emissions shall be discharged into the ambient atmosphere from any new motor vehicle or new motor vehicle engine subject to this subpart.

§ 85.12 Test procedures.

Every manufacturer of new motor vehicles or new motor vehicle engines subject to the standard prescribed in this subpart shall, prior to taking any of the actions specified in section 203(a)(1) of the Act, test or cause to be tested motor vehicles or motor vehicle engines in accordance with good engineering practice to ascertain that such test vehicles or engines, with proper maintenance, will meet the requirements of § 85.11 for the useful life of the vehicle or engine.

If, pursuant to § 85.55(a) the Administrator issues a certificate of conformity for the class or classes of motor vehicles or motor vehicle engines, represented by such test vehicles or engines, any new motor vehicle or motor vehicle engine which is in all material respects of substantially the same construction as such test vehicle or engine shall be deemed to be in conformity with the requirement of § 85.11.

Subpart C—Exhaust Emissions and Fuel Evaporative Emissions (Gasoline Fueled Light Duty Vehicles)

§ 85.20 Applicability.

The provisions of this subpart are applicable to new gasoline fueled light duty

motor vehicles beginning with the model year specified therein, except motorcycles and 1972 model year vehicles with an engine displacement of less than 50 cubic inches.

§ 85.21 Standards for exhaust emissions.

(a) Exhaust emissions from 1975 model year vehicles shall not exceed:

(1) Hydrocarbons—0.41 gram per vehicle mile.

(2) Carbon monoxide—3.4 grams per vehicle mile.

(3) Oxides of nitrogen—3.0 grams per vehicle mile.

(b) Exhaust emissions from 1976 and later model year vehicles shall not exceed:

(1) Hydrocarbons—0.41 gram per vehicle mile.

(2) Carbon monoxide—3.4 grams per vehicle mile.

(3) Oxides of nitrogen—0.4 gram per vehicle mile.

(c) The standards set forth in paragraphs (a) and (b) of this section refer to the exhaust emitted over a driving schedule as set forth in the applicable sections of "Test Procedures for Vehicle Exhaust and Fuel Evaporative Emissions (Gasoline Fueled Light Duty Vehicles)" of this part and measured and calculated in accordance with those procedures.

§ 85.22 Standard for fuel evaporative emissions.

(a) Fuel evaporative emissions from vehicles beginning with the 1972 model year shall not exceed:

(1) Hydrocarbons—2 grams per test.

(b) The standard set forth in paragraph (a) of this section refers to a composite sample of the fuel evaporative emissions collected under the conditions set forth in the "Test Procedures for Vehicle Exhaust and Fuel Evaporative Emissions (Gasoline Fueled Light Duty Vehicles)" of this part and measured in accordance with those procedures.

§ 85.23 Test procedures.

Every manufacturer of new motor vehicles subject to the standards prescribed in this subpart shall, prior to taking any of the actions specified in section 203(a)(1) of the Act, test or cause to be tested motor vehicles in accordance with test procedures in Subpart H of this part to ascertain that such test vehicles meet the requirements of §§ 85.21 and 85.22, as applicable. If, pursuant to § 85.55(a), the Administrator issues a certificate of conformity for the class or classes of vehicles represented by such test vehicles, any new motor vehicle which is in all material respects of substantially the same construction as such test vehicles shall be deemed to be in conformity with the requirements of §§ 85.21 and 85.22, as applicable.

Subpart D—Exhaust Emissions (Gasoline Fueled Heavy Duty Engines)

§ 85.30 Applicability.

The provisions of this subpart are applicable to new gasoline fueled heavy

duty engines beginning with the 1972 model year.

§ 85.31 Standards for exhaust emissions.

(a) Exhaust emissions from new gasoline fueled heavy duty engines shall not exceed:

(1) Hydrocarbons—275 p.p.m.

(2) Carbon monoxide—1.5 percent by volume.

(b) The standards set forth in paragraph (a) of this section refer to a composite sample representing the operating cycles set forth in the applicable sections of "Test Procedures for Engine Exhaust Emissions (Gasoline Fueled Heavy Duty Engines)" of this part and measured in accordance with those procedures.

§ 85.32 Test procedures.

Every manufacturer of new motor vehicle engines subject to the standards prescribed in this subpart shall, prior to taking any of the actions specified in section 203(a)(1) of the Act, test or cause to be tested motor vehicle engines in accordance with test procedures prescribed in Subpart I of this part to ascertain that such test engines meet the requirements of § 85.31. If, pursuant to § 85.55(a), the Administrator issues a certificate of conformity for the class or classes of motor vehicle engines represented by such test engines, any new motor vehicle engine which is in all material respects of substantially the same construction as such test engines shall be deemed to be in conformity with the requirements of § 85.31.

Subpart E—Exhaust Emissions (Heavy Duty Diesel Engines)

§ 85.40 Applicability.

The provisions of this subpart are applicable to new heavy duty diesel engines beginning with the 1972 model year.

§ 85.41 Standards for exhaust smoke.

(a) The opacity of smoke emissions from new diesel engines subject to this subpart shall not exceed:

(1) 40 percent during the engine acceleration mode.

(2) 20 percent during the engine lugging mode.

(b) The standards set forth in paragraph (a) of this section refer to exhaust smoke emissions generated under the conditions set forth in the "Test Procedures for Engine Exhaust Emissions (Heavy Duty Diesel Engines)" of this part and measured and calculated in accordance with those procedures.

§ 85.42 Test procedures.

Every manufacturer of new motor vehicle engines subject to the standards prescribed in this subpart shall, prior to taking any of the actions specified in section 203(a)(1) of the Act, test or cause to be tested motor vehicle engines in accordance with test procedures prescribed in Subpart J of this part, to ascertain that such test engines meet the requirements of § 85.41. If, pursuant to § 85.55(a), the Administrator issues a certificate of conformity for the class or

classes of motor vehicle engines represented by such test engines, any motor vehicle engine which is in all material respects of substantially the same construction as such test engines shall be deemed to be in conformity with the requirements of § 85.41.

Subpart F—Certification of Motor Vehicles and Motor Vehicle Engines

§ 85.50 Applicability.

The provisions of this subpart are applicable to new motor vehicles and new motor vehicle engines subject to the standards prescribed in this part. As used in this subpart, the term "vehicle" and "test vehicle" shall include engines and test engines, respectively.

§ 85.51 Application for certification.

(a) An application for a certificate of conformity to the regulations applicable to any new motor vehicle shall be made to the Administrator by the manufacturer.

(b) The application shall be in writing, signed by an authorized representative of the manufacturer, and shall include the following:

(1) Identification and description of the vehicles covered by the application and a description of their emission control systems.

(2) Projected U.S. sales data sufficient to enable the Administrator to select a test fleet representative of the vehicles for which certification is requested.

(3) A description of the test equipment and fuel proposed to be used.

(4) A description of the proposed mileage accumulation procedure for durability testing.

(5) A statement of recommended maintenance and procedures necessary to assure that the vehicles covered by a certificate of conformity in operation conform to the regulations, and a description of the program for training of personnel for such maintenance, and the equipment required.

(6) At the option of the manufacturer, the proposed composition of the emission data and durability data test fleet.

§ 85.52 Approval of procedure and equipment; test fleet selections.

Based upon the information provided in the application for certification, and any other information the Administrator may require, the Administrator will approve or disapprove in whole or in part the mileage accumulation procedure and equipment and fuel proposed by the manufacturer, and notify him in writing of such determination. Where any part of a proposal is disapproved, such notification will specify the reasons for disapproval. The Administrator will select a test fleet in accordance with § 85.89, § 85.110, or § 85.30, as appropriate.

§ 85.53 Required data.

The manufacturer shall perform the tests required by the applicable test procedures, and submit to the Administrator the following information:

(a) Durability data on such vehicles tested in accordance with the applicable test procedures of this part, and in such numbers as therein specified, which will show the performance of the systems installed on or incorporated in the vehicle for extended mileage or operation, as well as a record of all pertinent maintenance performed on the test vehicles.

(b) Emission data on such vehicles tested in accordance with the applicable emission test procedures of this part and in such numbers as therein specified, which will show their emissions after 0 miles or 0 hours, and 4,000 miles or 125 hours of operation (as appropriate).

(c) A description of tests performed to ascertain compliance with the general standards in § 85.3 and the data derived from such tests.

(d) A statement that the test vehicles with respect to which data are submitted have been tested in accordance with the applicable test procedures, that they meet the requirement of such tests, and that, on the basis of such tests, they conform to the requirements of the regulations in this part. If such statements cannot be made with respect to any vehicle tested, the vehicle shall be identified, and all pertinent test data relating thereto shall be supplied.

§ 85.54 Testing by the Administrator.

(a) The Administrator may require that any one or more of the test vehicles be submitted to him, at such place or places as he may designate, for the purpose of conducting emissions tests. The Administrator may specify that he will conduct such testing at the manufacturer's facility, in which case instrumentation and equipment specified by the Administrator shall be made available by the manufacturer for test operations. Any testing conducted at a manufacturer's facility pursuant to this paragraph shall be scheduled by the manufacturer as promptly as possible.

(b)(1) Whenever the Administrator conducts a test on a test vehicle, the results of that test shall comprise the official data for the vehicle at that prescribed test point.

(2) Whenever the Administrator does not conduct a test on a test vehicle at a test point, the manufacturer's test data will be accepted as the official data for that test point: *Provided*, That if the Administrator makes a determination based on testing under paragraph (a) of this section, that there is a lack of correlation between the manufacturer's test equipment and the test equipment used by the Administrator, no manufacturer's test data will be accepted for purposes of certification until the reasons for the lack of correlation are determined and the validity of the data is established by the manufacturer.

(3) If the Administrator determines that the test data developed under paragraph (a) of this section would cause a vehicle to fail due to excessive 4,000-mile or 125-hour emissions or excessive deterioration, then the following procedure shall be observed:

(i) The manufacturer may request a retest. Before the retest, the vehicle may be adjusted to manufacturer's specifications, and parts may be replaced in accordance with § 85.90, § 85.111, or § 85.131, as appropriate. All work on the vehicle shall be done at such location and under such conditions as the Administrator may prescribe.

(ii) The vehicle will be retested by the Administrator and the results of this test shall comprise the official data for that prescribed test point.

(4) If sufficient durability data is not available, at the time of any emission test conducted under paragraph (a) of this section, to enable the Administrator to determine whether a test vehicle would fail, the manufacturer may request a retest in accordance with the provisions of subparagraph (3) (i) and (ii) of this paragraph. If the manufacturer does not promptly make such request, he shall be deemed to have waived the right to a retest. A request for retest must be made before the manufacturer removes the vehicle from the test premises.

§ 85.55 Certification.

(a) (1) If, after a review of the test reports and data submitted by the manufacturer and data derived from any additional testing conducted pursuant to § 85.54, the Administrator determines that a test vehicle(s) conforms to the regulations of this part, he will issue a certificate of conformity with respect to such vehicle(s).

(2) Such certificate will be issued for such period not less than 1 year as the Administrator may determine and upon such terms as he may deem necessary to assure that any new motor vehicle covered by the certificate will meet the requirements of these regulations relating to durability and performance.

(b)(1) The Administrator will determine whether a vehicle covered by the application complies with applicable standards by observing the following relationships:

(i) A test vehicle selected under § 85.89(b) (2) or (4), § 85.110(b) (2) or (4), or § 85.130(b) (2), as appropriate, shall represent all vehicles in the same engine family of the same engine displacement-exhaust emission control system-evaporative emission control system combination.

(ii) A test vehicle selected under § 85.89(b) (3) or § 85.110(b) (3) as appropriate, shall represent all vehicles in the same engine family of the same engine displacement-exhaust emission control system-transmission type-fuel system combination.

(iii) A test vehicle selected under § 85.89(c) (1), § 85.110(c) (1), or § 85.130(c) (1), as appropriate, shall represent all vehicles of the same engine-system combination.

(2) The Administrator will proceed as in paragraph (a) of this section with respect to the vehicles belonging to an engine family all of which comply with applicable standards.

(3) If, after a review of the test reports and data submitted by the manufacturer and data derived from any additional testing conducted pursuant to § 85.54, the Administrator determines that one or more test vehicles of the certification test fleet do not meet applicable standards, he will notify the manufacturer in writing, setting forth the basis for his determination. Within 30 days following receipt of the notification, the manufacturer may request a hearing on the Administrator's determination. The request shall be in writing, signed by an authorized representative of the manufacturer and shall include a statement specifying the manufacturer's objections to the Administrator's determination, and data in support of such objections. If, after a review of the request and supporting data, the Administrator finds that the request raises a substantial factual issue, he shall provide the manufacturer a hearing in accordance with subpart G with respect to such issue.

(4) The manufacturer may, at his option, proceed with any of the following alternatives with respect to any engine family represented by a test vehicle(s) determined not in compliance with applicable standards:

(i) Request a hearing under subpart G, or

(ii) Delete from the application for certification the vehicles represented by the failing test vehicle. (Vehicles so deleted may be included in a later request for certification under § 85.57.) The Administrator will then select in place of each failing vehicle an alternate vehicle chosen in accordance with selection criteria employed in selecting the vehicle that failed, or

(iii) Modify the test vehicle and demonstrate by testing that it meets applicable standards. Another vehicle which is in all material respects the same as the first vehicle, as modified, shall then be operated and tested in accordance with applicable test procedures.

(5) If the manufacturer does not request a hearing or present the required data under subparagraph (4) of this paragraph, the Administrator will deny certification.

§ 85.56 Separate certification.

Where possible a manufacturer should include in a single application for certification all vehicles for which certification is required. A manufacturer may, however, choose to apply separately for certification of part of his product line. The selection of test vehicles and the computation of test results will be determined separately for each application.

§ 85.57 Addition of a vehicle after certification.

(a) If a manufacturer proposes to add to his product line a vehicle of the same engine-system combination as vehicles previously certified but which was not described in the application for certification when the test vehicle(s) representing other vehicles of that combination was certified, he shall notify the Admin-

istrator. Such notification shall be in advance of the addition unless the manufacturer elects to follow the procedure described in § 85.59. This notification shall include a full description of the vehicle to be added.

(b) The Administrator may require the manufacturer to perform such tests on the test vehicle(s) representing the vehicle to be added which would have been required if the vehicle had been included in the original application for certification.

(c) If, after a review of the test reports and data submitted by the manufacturer, and data derived from any testing conducted under § 85.54, the Administrator determines that the test vehicle(s) meets all applicable standards, the appropriate certificate will be amended accordingly. If the Administrator determines that the test vehicle(s) does not meet applicable standards, he will proceed under § 85.55(b).

§ 85.58 Changes to a vehicle covered by certification.

(a) The manufacturer shall notify the Administrator of any change in production vehicles in respect to any of the parameters listed in § 85.89(a)(3), § 85.89(b)(3), or § 85.110(b)(3), giving a full description of the change. Such notification shall be in advance of the change unless the manufacturer elects to follow the procedure described in § 85.59.

(b) Based upon the description of the change, and data derived from such testing as the Administrator may require or conduct, the Administrator will determine whether the vehicle, as modified, would still be covered by the certificate of conformity then in effect.

(c) If the Administrator determines that the outstanding certificate would cover the modified vehicles, he will notify the manufacturer in writing. Except as provided in § 85.59 the change may not be put into effect prior to the manufacturer's receiving this notification. If the Administrator determines that the modified vehicles would not be covered by the certificate then in effect, then the modified vehicles shall be treated as additions to the product line subject to § 85.57.

§ 85.59 Alternative procedure for notification of additions and changes.

(a) A manufacturer may, in lieu of notifying the Administrator in advance of an addition of a vehicle under § 85.57 or a change in a vehicle under § 85.58, notify him concurrently with the making of the change if the manufacturer believes the addition or change will not require any testing under the appropriate section. Upon notification to the Administrator, the manufacturer may proceed to put the addition or change into effect.

(b) The manufacturer may continue to produce vehicles as described in the notification to the Administrator for a maximum of 30 days, unless the Administrator grants an extension in writing. This period may be shortened by a notification in accordance with paragraph (c) of this section.

(c) If the Administrator determines, based upon a description of the addition or change, that no test data will be required, he will notify the manufacturer in writing of the acceptability of the addition or change. If the Administrator determines that test data will be required, he will notify the manufacturer to rescind the change within 5 days of receipt of the notification. The Administrator will then proceed as in § 85.57(b) and (c), or § 85.58(b) and (c) as appropriate.

(d) Election to produce vehicles under this section will be deemed to be a consent to recall all vehicles which the Administrator determines under § 85.57(c) do not meet applicable standards, and to cause such nonconformity to be remedied at no expense to the owner.

Subpart G—Hearings on Certification

§ 85.60 Hearing.

(a) After granting a request for a hearing under § 85.55, the Administrator will designate a Presiding Officer for the hearing.

(b) The General Counsel will represent the Environmental Protection Agency in any hearing under this subpart.

(c) If a time and place for the hearing have not been fixed by the Administrator under § 85.55, the hearing shall be held as soon as practicable at a time and place fixed by the Administrator or by the Presiding Officer.

§ 85.61 Hearing file.

(a) Upon his appointment pursuant to § 85.60, the Presiding Officer will establish a hearing file. The file shall consist of the notice issued by the Administrator under § 85.55, together with any accompanying material, the request for a hearing and the supporting data submitted therewith and all documents relating to the request for certification, including the application for certification and all documents submitted therewith, and correspondence and other data material to the hearing.

(b) The appeal file will be available for inspection by the applicant at the office of the Presiding Officer.

§ 85.62 Representation.

An applicant may appear in person, or may be represented by counsel or by any other duly authorized representative.

§ 85.63 Prehearing conference.

(a) The Presiding Officer upon the request of any party, or in his discretion, may arrange for a prehearing conference at a time and place specified by him to consider the following:

- (1) Simplification of the issues;
- (2) Stipulations, admissions of fact, and the introduction of documents;
- (3) Limitation of the number of expert witnesses;
- (4) Possibility of agreement disposing of all or any of the issues in dispute;
- (5) Such other matters as may aid in the disposition of the hearing, including

such additional tests as may be agreed upon by the parties.

(b) The results of the conference shall be reduced to writing by the Presiding Officer and made part of the record.

§ 85.64 Conduct of hearings.

(a) Hearings shall be conducted by the Presiding Officer in an informal but orderly and expeditious manner. The parties may offer oral or written evidence, subject to the exclusion by the Presiding Officer of irrelevant, immaterial, and repetitious evidence.

(b) Witnesses will not be required to testify under oath. However, the Presiding Officer shall call to the attention of witnesses that their statements may be subject to the provisions of title 18 U.S.C. 1001 which imposes penalties for knowingly making false statements or representations, or using false documents in any matter within the jurisdiction of any department or agency of the United States.

(c) Any witness may be examined or cross-examined by the Presiding Officer, the parties, or their representatives.

(d) Hearings shall be reported verbatim. Copies of transcripts of proceedings may be purchased by the applicant from the reporter.

(e) All written statements, charts, tabulations, and similar data offered in evidence at the hearing shall, upon a showing satisfactory to the Presiding Officer of their authenticity, relevancy, and materiality, be received in evidence and shall constitute a part of the record.

(f) Oral argument may be permitted in the discretion of the Presiding Officer and shall be reported as part of the record unless otherwise ordered by him.

§ 85.65 Initial and final decisions.

(a) The Presiding Officer shall make an initial decision which shall include written findings and conclusions and the reasons or basis therefor on all the material issues of fact, law or discretion presented on the record. The findings, conclusions, and written decision shall be provided to the parties and made a part of the record. The initial decision shall become the decision of the Secretary without further proceedings unless there is an appeal to the Administrator or motion for review by the Administrator within 20 days of the date the initial decision was filed.

(b) On appeal from or review of the initial decision the Administrator shall have all the powers which he would have in making the initial decision including the discretion to require or allow briefs, oral argument, the taking of additional evidence or the remanding to the Presiding Officer for additional proceedings. The decision by the Administrator shall include written findings and conclusions and the reasons or basis therefor on all the material issues of fact, law, or discretion presented on the appeal or considered in the review.

Subpart H—Test Procedures for Vehicle Exhaust and Fuel Evaporative Emissions (Gasoline Fueled Light Duty Vehicles)

§ 85.70 Introduction.

The procedures described in this subpart will be the test program to determine the conformity of gasoline fueled light duty vehicles with the applicable standards set forth in this part.

(a) The test consists of prescribed sequences of fueling, parking, and operating conditions. The exhaust gases generated during vehicle operation are diluted with air and sampled continuously for subsequent analysis of specific components by prescribed analytical techniques. The fuel evaporative emissions are collected for subsequent weighing during both vehicle parking and operating events. The test applies to vehicles equipped with catalytic or direct-flame afterburners, induction system modifications, or other systems or to uncontrolled vehicles and engines.

(b) The exhaust emission test is designed to determine hydrocarbon, carbon monoxide, and oxides of nitrogen mass emissions while simulating an average trip in an urban area of 7.5 miles. The test consists of engine startups and vehicle operation on a chassis dynamometer through a specified driving schedule, as described in Appendix A to this part. A proportional part of the diluted exhaust emissions is collected continuously, for subsequent analysis, using a constant volume (variable dilution) sampler.

(c) The fuel evaporative emission test is designed to determine fuel hydrocarbon evaporative emissions to the atmosphere as a consequence of urban driving, and diurnal temperature fluctuations during parking. It is associated with a series of events representative of a motor vehicle's operation, which result in fuel vapor losses directly from the fuel tank and carburetor. Activated carbon traps are employed in collecting the vaporized fuel. The test procedure is specifically aimed at collecting and weighing:

(1) Diurnal breathing losses from the fuel tank and other parts of the fuel system when the fuel tank is subjected to a temperature increase representative of the diurnal range;

(2) Running losses from the fuel tank and carburetor resulting from a simulated trip on a chassis dynamometer; and

(3) Hot soak losses from the fuel tank and carburetor which result when the vehicle is parked and the hot engine is turned off.

§ 85.71 Gasoline specifications.

(a) Fuel having the following specifications or substantially equivalent specifications approved by the Administrator, shall be used in exhaust and evaporative emission testing. The lead content and octane rating of the fuel shall be in the

range recommended by the vehicle or engine manufacturer.

Item	ASTM designation	Specifications
Distillation range	D 86	
IBP, ° F		75-95
10 percent point, ° F		120-135
50 percent point, ° F		200-230
90 percent point, ° F		300-325
EP, ° F (max.)		415
Sulfur, wt. percent, max.	D 1296	0.10
Phosphorous, theory		0.0
RVP, lb	D 323	8.7-9.2
Hydrocarbon composition	D 1319	
Olefins, percent, max.		10
Aromatics, percent, max.		35
Saturates		Remainder

¹ For testing which is unrelated to fuel evaporative emission control, the specified range is 8.0-9.2.

(b) Fuels representative of commercial fuels which will generally be available through retail outlets shall be used in mileage accumulation. The lead content and octane rating of the fuel used shall be in the range recommended by the vehicle or engine manufacturer. The Reid Vapor Pressure of the fuel used shall be characteristic of the motor fuel during the season during which the mileage accumulation takes place.

(c) The specification range of the fuels to be used under paragraph (b) of this section shall be reported in accordance with § 85.51(b)(3).

§ 85.72 Vehicle and engine preparation (fuel evaporative emissions).

(a) (1) Apply appropriate leak-proof fittings to all fuel system external vents to permit collection of effluent vapors from these vents during the course of the prescribed tests. Since the prescribed test requires the temporary plugging of the inlet pipe to the air cleaner, it will be necessary to install a probe for collecting the normal effluents from this source. Where antisurge/vent filler caps are employed on the fuel tank, plug off the normal vent if it does not conveniently lend itself to the collection of vapors which emanate from it, and introduce a separate vent, with appropriate fitting, on the cap. Where the fuel tank vent line terminus is inaccessible, sever the line at a convenient point near the fuel tank and install the collection system in a closed circuit assembly with the severed ends. All fittings shall terminate in $\frac{1}{16}$ -inch ID tube sections for ready connection to the collection systems and shall be designed for minimum dead space.

(2) The design and installation of the necessary fittings shall not disturb the normal function of the fuel system components or the normal pressure relationships in the system.

(b) (1) Inspect the fuel system carefully to insure the absence of any leaks to the atmosphere of either liquid or vapor which might affect the accuracy of the test or the performance of the control system. Corrective action, if any, shall be reported with the test results under § 85.53.

(2) Care should be exercised, in the application of any pressure tests, neither to purge nor load the evaporative emission control system.

(c) Prepare fuel tank for recording the temperature of the prescribed test fuel at its approximate midvolume.

(d) Provide additional fittings and adapters, as required to accommodate a fuel drain at the lowest point possible in the tank as installed on the vehicle.

§ 85.73 Vehicle preconditioning (fuel evaporative emissions).

Vehicle to be tested for compliance with the fuel evaporative emissions standard of this part shall be preconditioned as follows:

(a) The test vehicle shall be operated under the conditions prescribed for mileage accumulation, § 85.91, for 1 hour immediately prior to the operations prescribed below.

(b) The fuel tank shall be drained and specified test fuel (85.71(a)) added. The evaporative emission control system or device shall not be abnormally purged or loaded as a result of draining or fueling the tank.

(c) The test vehicle shall be placed on the dynamometer and operated over a simulated trip, according to the applicable requirements and procedures of §§ 85.75-85.80 except that the engine need not be cold when starting the run on the dynamometer and only a single trip of 7.5 miles shall be run. During the run the ambient temperature shall be between 68° F. and 86° F.

(d) The engine and cooling fan shall be stopped upon completion of the dynamometer operation and the vehicle permitted to soak either on or off the dynamometer stand at an ambient temperature between 76° F. and 86° F. for a period of not less than 1 hour prior to the soak period prescribed in § 85.74 (a) (1).

§ 85.74 Evaporative emission collection procedure.

The standard test procedure consists of three parts described below which shall be performed in sequence and without any interruption in the test conditions prescribed.

(a) *Diurnal breathing loss test.* (1) The test vehicle shall be allowed to "soak" in an area where the ambient temperature is maintained between 60° F. and 86° F. for a period of not less than 10 hours. (The vehicle preparation requirements of § 85.72 may be performed during this period.) It shall then be transferred to a soak area where the ambient temperature is maintained between 76° F. and 86° F. Upon admittance to the 76° F.-86° F. soak area, the prescribed fuel tank thermocouple shall be connected to the recorder and the fuel and ambient temperatures recorded at a chart speed of approximately 12 inches per hour (or equivalent record).

(2) The fuel tank of the prepared test vehicle, preconditioned according to § 85.73 shall be drained and recharged with the specified test fuel, § 85.71(a),

to the prescribed "tank fuel volume," defined in § 85.1. The temperature of the fuel following the charge to the tank shall be 60° F.±2° F. Care should be exercised against abnormal loading of the evaporative emission control system or device as a result of fueling the tank.

(3) Immediately following the fuel charge to the tank, the exhaust pipe(s) and inlet pipe to the air cleaner shall be plugged and the prescribed vapor collection systems installed on all fuel system external vents. Multiple vents may be connected to a single collection trap provided that, where there is more than one external vent on a fuel system distinguishing between carburetor and tank vapors, separate collection systems shall be employed to trap the vapors from the separate sources. Every precaution shall be taken to minimize the lengths of the collection tubing employed and to avoid sharp bends across the entire system.

(4) Artificial means shall be employed to heat the fuel in the tank to 84° F.±2° F. The prescribed temperature of the fuel shall be achieved over a period of 60 minutes±10 minutes using a constant rate of heat input. After a minimum of 1 hour, following admittance to the 76° F.-86° F. soak area, the vehicle shall be moved onto the dynamometer stand for the subsequent part of the test. The fuel tank thermocouple may be temporarily disconnected to permit moving the test vehicle. Plugs shall be removed from the exhaust pipe(s) and inlet pipe to the air cleaner.

(b) *Running loss test.* (1) The vehicle shall be placed on the dynamometer and the fuel tank thermocouple reconnected. The fuel temperature and the ambient air temperature shall be recorded at a chart speed of approximately 12 inches per hour (or equivalent record).

(2) Where the only external vent(s) is located in the immediate vicinity of the carburetor air horn, such that any "running loss" emissions would be inducted into the engine, there is no requirement to collect any vapor losses during this part of the test and the vapor-loss measurement system shall be temporarily disconnected and clamped.

(3) The vehicle shall be operated on the dynamometer according to the requirements and procedures of §§ 85.75-85.85. The engine and fan shall be turned off upon completion of the dynamometer run and the exhaust and air cleaner inlet pipes shall be replugged.

(4) Any vapor collection systems employed during this part of the test shall be left intact for their continued use during the following part. Any part of the vapor collection system disconnected during this phase of the test shall be reconnected for the following phase.

(c) *Hot soak test.* Upon completion of the dynamometer run, the test vehicle shall be permitted to soak with hood down for a period of 1 hour at an ambient temperature between 76° F. and 86° F. This operation completes the test. The traps are disconnected and weighed according to § 85.82.

§ 85.75 Dynamometer driving schedule.

(a) The dynamometer driving schedule to be followed consists of a non-repetitive series of idle, acceleration, cruise, and deceleration modes of various time sequences and rates. The driving schedule is defined by a smooth transition through the speed vs. time relationships listed in Appendix A. The time sequence begins upon starting the vehicle according to the startup procedure described in § 85.80.

(b) A speed tolerance of ±2 m.p.h. and a time tolerance of ±1 second (or an algebraic combination of the two) from either the speed-time relationship prescribed in Appendix A or as printed on a driver's aid chart approved by the Administrator are acceptable. Speed tolerances greater than 2 m.p.h. (such as occur when shifting manual transmission vehicles) are acceptable provided they occur for less than 2 seconds on any one occasion. Speeds lower than those pre-vehicle is operated at maximum available power during such occurrences. Further, speed deviations from those prescribed due to stalling are acceptable provided the provisions of § 85.80(f) are adhered to.

§ 85.76 Dynamometer procedure.

(a) The dynamometer run consists of two tests, a "cold" start test after a minimum 12-hour soak according to the provisions of §§ 85.73-85.74, and a "hot" start test with a 10-minute soak between the two tests. Engine startup, operation over the driving schedule, and engine shutdown make a complete cold start test. Engine startup and operation over the first 505 seconds of the driving schedule complete the hot start test. The exhaust emissions are diluted with air to a constant volume and a portion is sampled continuously during each test. The composite samples collected in bags are analyzed for hydrocarbons, carbon monoxide, carbon dioxide, and oxides of nitrogen. A parallel sample of the dilution air is similarly analyzed for hydrocarbon, carbon monoxide, and oxides of nitrogen.

(b) During dynamometer operation, a fixed speed cooling fan shall be positioned so as to direct cooling air to the vehicle in an appropriate manner with the engine compartment cover open. The fan capacity shall normally not exceed 5,300 c.f.m. If, however, the manufacturer can show that during field operation the vehicle receives additional cooling, the fan capacity may be increased or additional fans used if approved in advance by the Administrator. In the case of vehicles with front engine compartments, the fan(s) shall be squarely positioned between 8 and 12 inches in front of the cooling air inlets (grill). In the case of vehicles with rear engine compartments (or if special designs make the above impractical), the cooling fan(s) shall be placed in a position to provide sufficient air to maintain engine cooling.

(c) The vehicle shall be nearly level when tested in order to prevent abnormal fuel distribution.

(d) Flywheels, electrical or other means of simulating inertia as shown in the following table shall be used. If the equivalent inertia specified is not available on the dynamometer being used, the next higher equivalent inertia (not to exceed 250 lbs.) available shall be used.

Loaded vehicle weight, pounds	Equivalent inertia weight, pounds	Road load power @ 50 m.p.h., horsepower
Up to 1,125.....	1,000	5.9
1,125 to 1,375.....	1,000	6.5
1,375 to 1,625.....	1,500	7.1
1,625 to 1,875.....	1,750	7.7
1,875 to 2,125.....	2,000	8.3
2,125 to 2,375.....	2,250	8.8
2,375 to 2,625.....	2,500	9.4
2,625 to 2,875.....	2,750	9.9
2,875 to 3,125.....	3,000	10.3
3,125 to 3,375.....	3,500	11.2
3,375 to 4,250.....	4,000	12.0
4,251 to 4,750.....	4,500	12.7
4,751 to 5,250.....	5,000	13.4
5,251 to 5,750.....	5,500	13.9
5,751 to above.....	5,500	14.4

(e) Power absorption unit adjustment.

(1) The power absorption unit shall be adjusted to reproduce road load power at 50 m.p.h. true speed. The indicated road load power setting shall take into account the dynamometer friction. The relationship between road load (absorbed) power and indicated road load power for a particular dynamometer shall be determined by the procedure outlined in Appendix B or other suitable means.

(2) The road load power listed in the table above shall be used or the vehicle manufacturer may determine the road load power by the following procedure and request its use:

(i) Measuring the absolute manifold vacuum of a representative vehicle, of the same equivalent inertia weight class, when operated on a level road under balanced wind conditions at a true speed of 50 m.p.h., and

(ii) Noting the dynamometer indicated road load horsepower setting required to reproduce that manifold vacuum, when the same vehicle is operated on the dynamometer at a true speed of 50 m.p.h. The tests on the road and on the dynamometer shall be performed with the same vehicle ambient absolute pressure (usually barometric), i.e. within ± 5 mm. Hg.

(iii) The road load power shall be determined according to the procedure outlined in Appendix B and adjusted according to the following if applicable.

(3) Where it is expected that more than 33 percent of the vehicles in an engine family will be equipped with air conditioning, the road load power listed above or as determined in paragraph 2 of this subsection shall be increased by 10 percent for testing all test vehicles representing such engine family.

(f) The vehicle speed (m.p.h.) as measured from the dynamometer rolls shall be used for all conditions. A speed vs. time recording, as evidence of dynamometer test validity, shall be supplied on request of the Administrator.

(g) Practice runs over the prescribed driving schedule may be performed to find the minimum throttle action to maintain the proper speed-time relationship.

NOTE: When using two-roll dynamometers a truer speed-time trace may be obtained by minimizing the rocking of the vehicle in the rolls. The rocking of the vehicle changes the tire rolling radius on each roll. The rocking may be minimized by restraining the vehicle horizontally (or nearly so) by using a cable and winch.

(h) The drive wheel tires may be inflated up to 45 p.s.i.g. in order to prevent tire damage. The drive wheel tire pressure shall be reported with the test results.

(i) If the dynamometer has not been operated during the 2-hour period immediately preceding the test it shall be warmed up for 15 minutes by operating it at 30 m.p.h. using a nontest vehicle.

§ 85.77 Three-speed manual transmissions.

(a) All test conditions except as noted shall be run in highest gear.

(b) Cars equipped with free wheeling or overdrive units shall be tested with this unit (free wheeling or overdrive) locked out of operation.

(c) Idle shall be run with transmission in gear and with clutch disengaged (except first idle; see § 85.80).

(d) The vehicle shall be driven with minimum throttle movement to maintain the desired speed.

(e) Acceleration modes shall be driven smoothly with the shift speeds as recommended by the manufacturer. If the manufacturer does not recommend shift speeds, the vehicle shall be shifted from first to second gear at 15 m.p.h. and from second to third gear at 25 m.p.h. The operator shall release the accelerator pedal during the shift, and accomplish the shift with minimum closed throttle time. If the vehicle cannot accelerate at the specified rates, the vehicle shall be accelerated at WOT until the vehicle speed reaches the speed at which it should be at that time during the test.

(f) The deceleration modes shall be run with clutch engaged and without shifting gears from the previous mode, using brakes or throttle as necessary to maintain the desired speed. For those modes which decelerate to zero, the clutch shall be depressed when the speed drops below 15 m.p.h., when engine roughness is evident, or when engine stalling is imminent.

(g) Downshifting is allowed at the beginning of or during a power mode if recommended by the manufacturer or if the engine obviously is lugging.

§ 85.78 Four-speed and five-speed manual transmissions.

(a) Use the same procedure as for three-speed manual transmissions for shifting from first to second gear and from second to third gear. If the manufacturer does not recommend shift speeds, the vehicle shall be shifted from third to fourth gear at 40 m.p.h. Fifth gear may be used at the manufacturer's option.

(b) If transmission ratio in first gear exceeds 5:1, follow the procedure for three- or four-speed manual transmission vehicles as if the first gear did not exist.

§ 85.79 Automatic transmissions.

(a) All test conditions shall be run with the transmission in "Drive" (highest gear). Automatic stick-shift transmissions may be shifted as manual transmissions at the option of the manufacturer.

(b) Idle modes shall be run with the transmission in "Drive" and the wheels braked (except first idle; see § 85.80).

(c) The vehicle shall be driven with minimum throttle movement to maintain the desired speed.

(d) Acceleration modes shall be driven smoothly allowing the transmission to shift automatically through the normal sequence of gears. If the vehicle cannot accelerate at the specified rates, the vehicle shall be accelerated at WOT until the vehicle speed reaches the speed at which it should be at that time during the driving schedule.

(e) The deceleration modes shall be run in gear using brakes or throttle as necessary to maintain the desired speed.

§ 85.80 Engine starting and restarting.

(a) The engine shall be started according to the manufacturer's recommended starting procedures. The initial 20-second-idle period shall begin when the engine starts.

(b) Choke operation:
 (1) Vehicles equipped with automatic chokes shall be operated according to the manufacturer's operating or owner's manual including choke setting and "kick-down" from cold fast idle. If choke "kick-down" time is not specified, it shall be performed 13 seconds after the engine starts. The transmission shall be placed in gear 15 seconds after the engine is started. If necessary, braking may be employed to keep the drive wheels from turning.

(2) Vehicles equipped with manual chokes shall be operated according to the instructions which will be included in the manufacturer's operating or owner's manual. If not specified, the choke shall be operated to maintain engine idle at 1,100 \pm 50 r.p.m. during the initial idle period and used where necessary during the remainder of the test to keep the engine running.

(c) The operator may use more choke, more throttle, etc., where necessary to keep the engine running.

(d) If the vehicle does not start after 10 seconds of cranking, cranking shall cease and the reason for failure to start determined. The revolution counter on the constant volume sampler (see § 85.85, Dynamometer test runs) shall be turned off and the sample solenoid valves placed in the "dump" position during this diagnostic period. In addition, either the positive displacement pump should be turned off or the exhaust tube disconnected from the tailpipe during the diagnostic period. If failure to start is an operational error, the vehicle shall be rescheduled

for testing from a cold start. If failure to start is caused by vehicle malfunction, corrective action of less than 30 minutes duration may be taken and the test continued. The sampling system shall be reactivated at the same time cranking is started. When the engine starts, the driving schedule timing sequence shall begin. If failure to start is caused by vehicle malfunction and the vehicle cannot be started, the test shall be voided, the vehicle removed from the dynamometer, corrective action taken, and the vehicle rescheduled for test. The reason for the malfunction (if determined) and the corrective action taken shall be reported.

(e) If the engine "false starts", the operator shall repeat the recommended starting procedure (such as resetting the choke, etc.).

(f) Stalling:

(1) If the engine stalls during an idle period, the engine shall be restarted immediately and the test continued. If the engine cannot be started soon enough to allow the vehicle to follow the next acceleration as prescribed, the driving schedule indicator shall be stopped. When the vehicle restarts the driving schedule indicator shall be reactivated.

(2) If the engine stalls during some operating mode other than idle, the driving schedule indicator shall be stopped, the vehicle restarted, accelerated to the speed required at that point in the driving schedule and the test continued.

(3) If the vehicle will not restart within 1 minute, the test shall be voided, the vehicle removed from the dynamometer, corrective action taken, and the vehicle rescheduled for test. The reason for the malfunction (if determined) and the corrective action taken shall be reported.

§ 85.81 Sampling and analytical system (exhaust emissions).

(a) *Schematic drawings.* The following figures (Figs. 1a and 1b) are schematic drawings of the exhaust gas sampling and analytical systems which will be used for testing under the regulations in this part. Additional components such as instruments, valves, solenoids, pumps, and switches may be used to provide additional information and coordinate the functions of the component systems.

(b) *Component description (exhaust gas sampling system).* The following components will be used in the exhaust gas sampling system for testing under the regulations in this part. See Figure 1a. Other types of constant volume samplers may be used if shown to yield equivalent results.

(1) A dilution air filter assembly consisting of a particulate (paper) filter to remove solid matter from the dilution air and thus increase the life of the charcoal filter; a charcoal filter to reduce and stabilize the background hydrocarbon level; and a second particulate filter to remove charcoal particles from the air stream. The filters shall be of sufficient capacity and the duct which carries the dilution air to the point where the exhaust gas is added shall be of sufficient

size so that the pressure at the mixing point is less than 1 inch of water pressure below ambient when the constant volume sampler is operating at its maximum flow rate.

(2) A flexible, leak-tight connector and tube to the vehicle tailpipe. The flexible tubing shall be sized and connected in such a manner that the static pressure variations in the vehicle tailpipe(s) remain within ± 1 inch of water of the static pressure variations measured during a dynamometer driving cycle with no connections to the tailpipe(s).

(3) A heating system to preheat the heat exchanger to within $\pm 10^\circ$ F. of its operating temperature before the test begins.

(4) A heat exchanger capable of limiting the gas mixture temperature variation during the entire test to $\pm 10^\circ$ F. as measured at a point immediately ahead of the positive displacement pump.

(5) A positive displacement pump to pumps dilute exhaust mixture. The pump capacity (300 to 350 c.f.m. is sufficient for testing most vehicles) shall be large enough to virtually eliminate water condensation in the system. See Appendix C for flow calibration techniques.

(6) Temperature sensor (T1) with an accuracy of $\pm 2^\circ$ F. to allow continuous recording of the temperature of the dilute exhaust mixture entering the positive displacement pump. (See § 85.83 (1).)

(7) Gauge (G1) with an accuracy of ± 3 mm. Hg to measure the pressure depression of the dilute exhaust mixture entering the positive displacement pump, relative to atmospheric pressure.

(8) Gauge (G2) with an accuracy of ± 3 mm. Hg to measure the pressure increase across the positive displacement pump.

(9) Sample probes (S1 and S2) pointed upstream to collect samples from the dilution air stream and the dilute exhaust mixture. Additional sample probes may be used, for example, to obtain continuous concentration traces of the dilute exhaust stream. In such case the sample flow rate, in standard cubic feet per test phase, must be added to the calculated dilute exhaust volume. The position of the sample probe in Figure 1a is pictorial only.

(10) Filters (F1 and F2) to remove particulate matter from dilution air and dilute exhaust samples prior to entering sample collection bags.

(11) Pumps (P1 and P2) to pump the dilution air and dilute exhaust into their respective sample collection bags.

(12) Flow control valves (N1 and N2) to regulate flows to sample collection bags, at constant flow rates. The minimum sample flow rate shall be 10 c.f.h.

(13) Flowmeters (FL1 and FL2) to insure, by visual observation, that constant flow rates are maintained throughout the test.

(14) Three-way solenoid valves (V1, V2, and V3) to direct sample streams to either their respective bags or overboard.

(15) Quick-connect leak-tight fittings (C1, C2, and C3), with automatic shut-off on bag side, to attach sample bags to sample system.

(16) Sample collection bags for dilution air and exhaust samples of sufficient capacity so as not to impede sample flow.

(17) Revolution counters to count the revolutions of the positive displacement pump while each test phase is in progress and samples are being collected.

(c) *Component description (exhaust gas analytical system).* The following components will be used in the exhaust gas analytical system for testing under the regulations in this part. The analytical system provides for the determination of hydrocarbon concentrations by flame ionization detector (FID) analysis, the determination of carbon monoxide and carbon dioxide concentrations by nondispersive infrared (NDIR) analysis and the determination of oxides of nitrogen concentrations by chemiluminescence (CL) analysis in dilute exhaust samples. The chemiluminescence method of analysis requires that the nitrogen dioxide present in the sample be converted to nitric oxide before analysis. See Appendix E. Other types of analyzers may be used if shown to yield equivalent results and if approved in advance by the Administrator. See Figure 1b.

(1) Quick-connect leak-tight fitting (C4) to attach sample bags to analytical system.

(2) Filter (F3) to remove any residual particulate matter from the collected sample.

(3) Pump (P3) to transfer samples from the sample bags to the analyzers.

(4) Selector valves (V4, V5, V6, V7, and V8) for directing samples, span gases or zeroing gases to the analyzers.

(5) Flow control valves (N3, N4, N5, N6, N7, N8, N9, N10, N11, N12, and N13) to regulate the gas flow rates.

(6) Flowmeters (FL3, FL4, and FL5) to indicate gas flow rates.

(7) Manifold (M1) to collect the expelled gases from the analyzers.

(8) Pump (P4) to transfer expelled gases from the collection manifold to a vent external to the test room (optional).

(9) Analyzers to determine hydrocarbon, carbon monoxide, carbon dioxide and oxides of nitrogen concentrations.

(10) An oxides of nitrogen converter to convert any NO_2 present in the samples to NO before analysis.

(11) Selector valves (V9 and V10) to allow the sample, span, calibrating or zeroing gases to bypass the converter.

(12) Water trap (T1) to partially remove water and a valve (V11) to allow the trap to be drained.

(13) Sample conditioning columns to remove remainder of water (WR1 and WR2 containing indicating CaSO_4) and carbon dioxide (CDR1 and CDR2 containing ascarite) from the CO analysis stream.

(14) Selector valves (V12 and V13) to permit switching from exhausted absorbing columns to fresh columns.

(15) Water bubbler (W1) to allow saturation of the CO_2 span gas to check efficiency of absorbing columns.

(16) Recorders (R1, R2, R3, and R4) to provide permanent records of calibration, spanning and sample measurements.

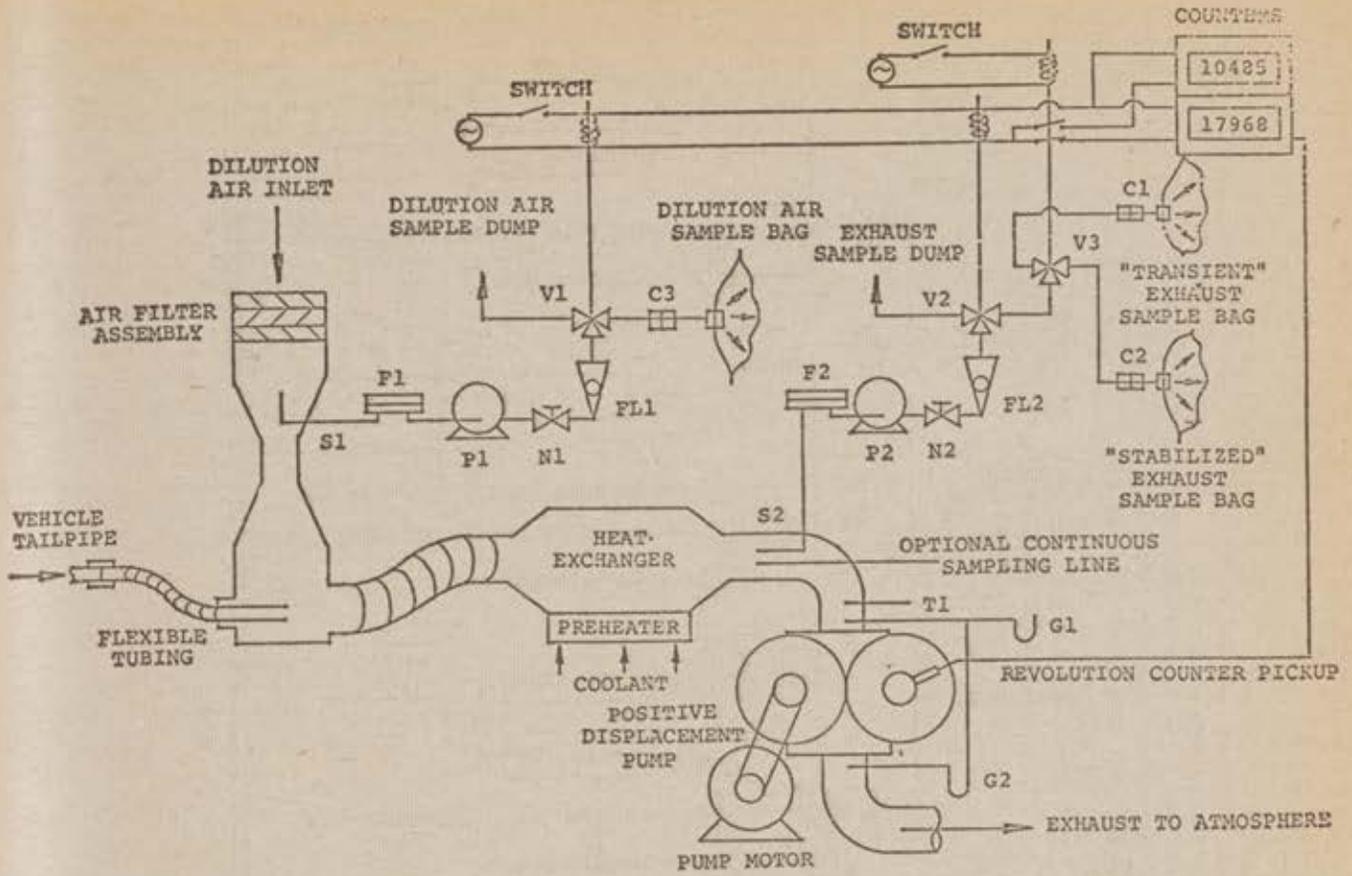


Figure 1a. Exhaust Gas Sampling System

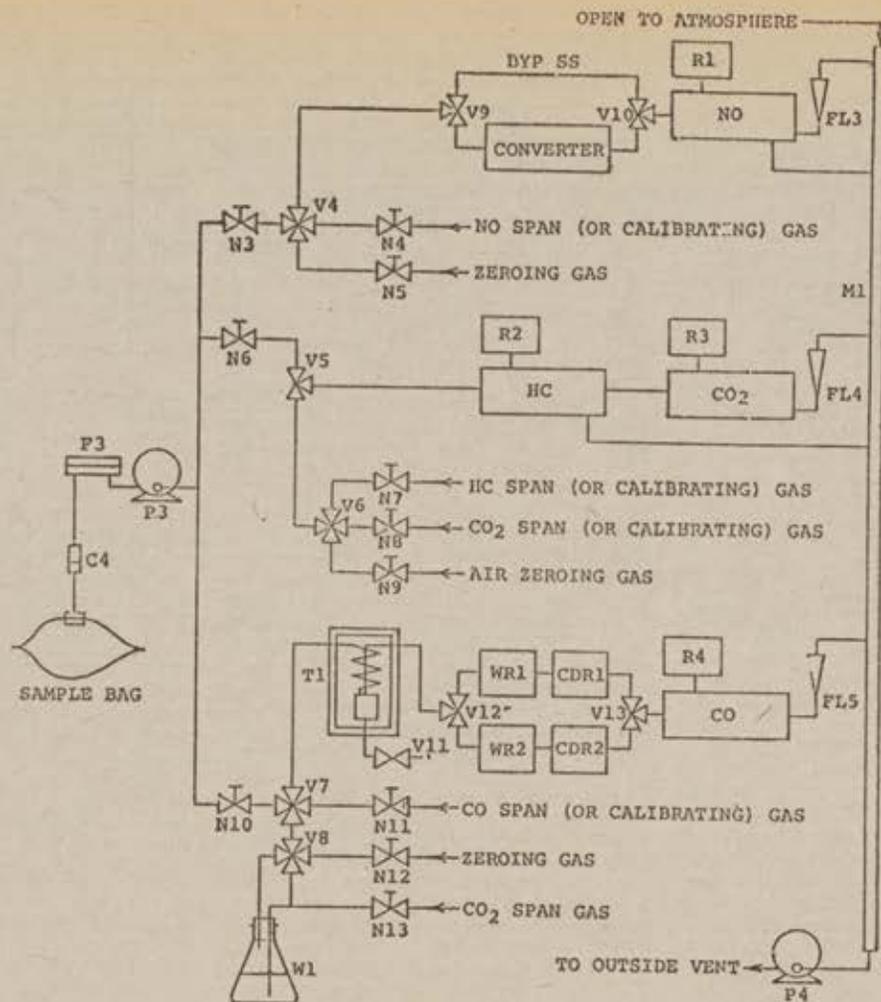


Figure 1b. Exhaust Gas Analytical System

§ 85.82 Sampling and analytical system (fuel evaporative emissions).

(a) Schematic drawing. (1) The following figures (Figures 2, 3, and 4) are flow diagrams of typical evaporative loss collection applications.

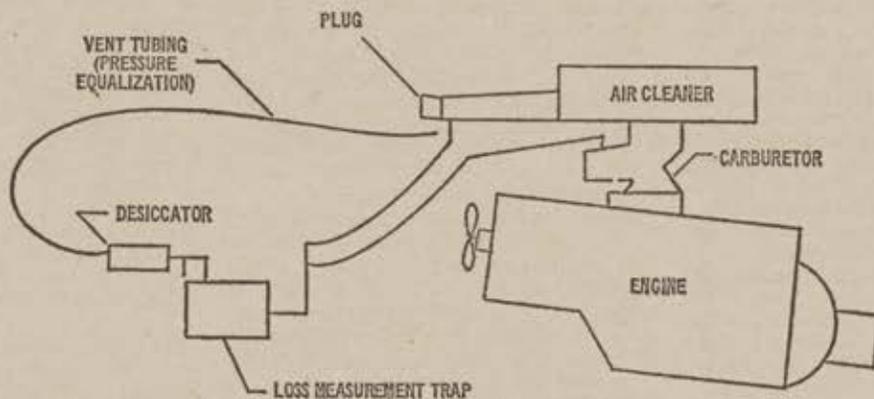


Figure 2. Typical carburetor evaporative loss collection arrangement (schematic).

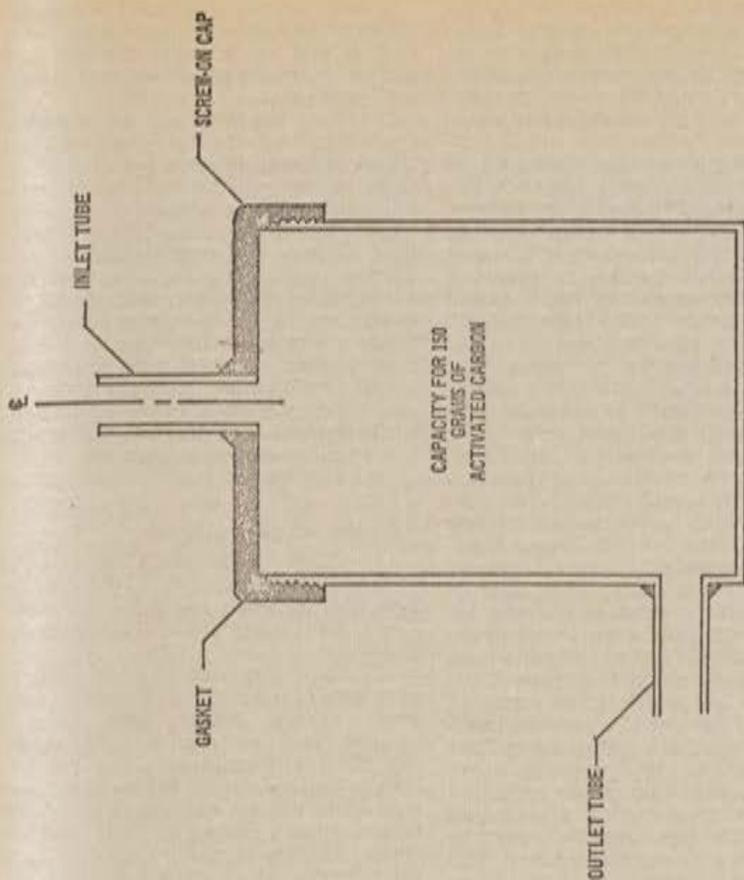


Figure 5. Typical activated carbon trap (schematic).

- (1) Canister—300±25 ml, cylindrical container having a length to diameter ratio of 1.4±0.1. An inlet tube, 1/8 inch ID and 1 inch long is sealed into the top of the canister, at its geometric center. A similar outlet tube is sealed into the wall 1/4 inch from the bottom of the canister. The canister is designed to withstand an air pressure of 2 p.s.i., when sealed, without evidence of leaking when immersed in water for 30 seconds.
- (ii) Activated carbon—meeting the following specifications:
- | Screen analysis size: | Percent |
|-----------------------|---------|
| Less than 1.4 mm | 0 |
| 1.7-2.4 mm | 90-100 |
| More than 3.0 mm | 0 |
- Surface area, min. (N₂ BET method): 1,000 square meters per gram.
 Adsorption capacity, min. (carbon tetrachloride): 60 percent, by weight.
 Volatile material including adsorbed water vapor: None.
- : Brunauer, Emmett & Teller, Journal of the American Chemical Society, Vol. 60, p. 309, 1938.

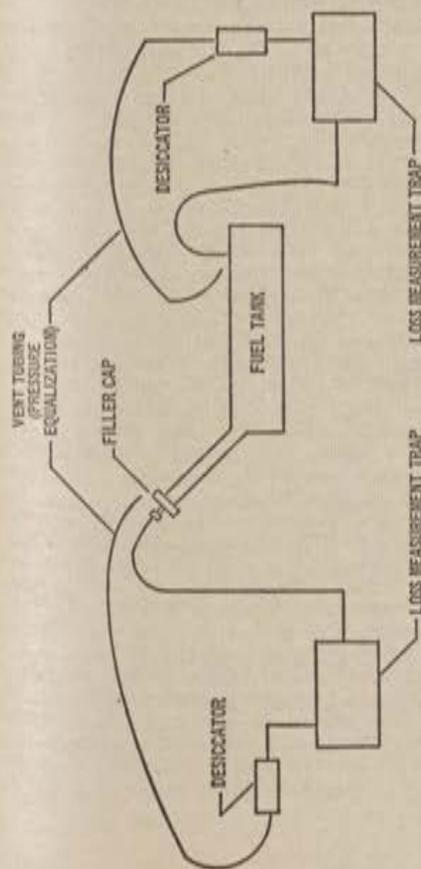


Figure 3. Typical fuel tank evaporative loss collection arrangement (schematic).

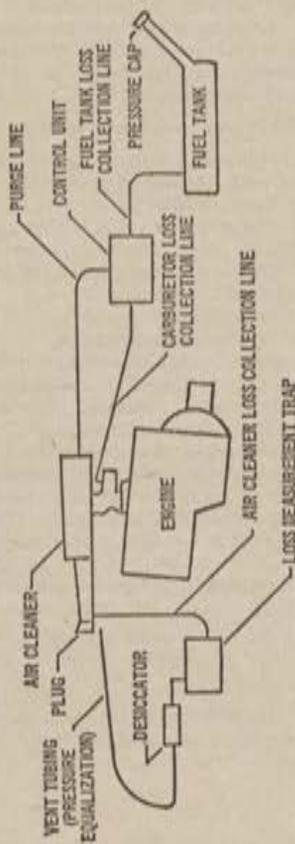


Figure 4. Typical fuel evaporative loss collection arrangement for vehicle equipped with evaporative emission control system (schematic).

- (2) Figure 2 represents an arrangement for collecting losses which emanate from the carburetor. Figure 3 depicts the means for separately collecting the vapors which emanate from the fuel tank vent line and filler cap. Figure 4 shows an arrangement for collecting the losses from a closed fuel system, vented to the atmosphere solely through the air cleaner, as might be the case with certain fuel evaporative emission control devices.
- (3) Schematic drawings of arrangements to be employed shall be submitted in accordance with § 85.51(b) (3).
- (b) Collection equipment. The following equipment shall be used for this collection of fuel evaporative emissions. (Item quantities are determined by individual test needs.)
- (1) Activated carbon trap. See Figure 5 for specifications of one design; other configurations may be used: Provided, That they give demonstrably equivalent results.

The activated carbon trap is prepared for the test by attaching clamped sections of vinyl tubing to the inlet and outlet tubes of the canister. The canister is then filled with 150±10 gm. hot activated carbon which had previously been oven-dried for 3 hours at 300° F. Loss of carbon through the inlet and outlet tubes is prevented through the use of wire screens of 0.7 mm. mesh or wads of loosely packed glass wool. The canister is closed immediately after filling and the carbon is allowed to cool while the trap is vented through a drying tube via the unclamped outlet arm.

(iii) The trap is sealed and weighed after cooling and the weight, to the nearest 0.1 gram, is inscribed on the canister body. Within 12 hours of the scheduled test, the weight of the trap is checked and if it has changed by more than 0.5 gm., it is redried to constant weight. This redrying operation is performed by passing dry nitrogen, heated to 275° F., through the trap, via the inlet tube, at a rate of 1 liter per minute until checks made at 30-minute intervals do not vary by more than 0.1 percent of the gross weight. The trap and its contents are allowed to cool to room temperature, while vented through a drying tube via the outlet arm, before use.

(2) *Auxiliary collection equipment.*

(i) Drying tube—transparent, tubular body 3/4 inch ID, 6 inches long, with serrated tips and removable caps.

(ii) Desiccant—indicating variety, 8 mesh. The drying tube is attached to the outlet tube of the collection traps to prevent ambient moisture from entering the trap. It is prepared by filling the empty drying tube with fresh desiccant using loose wad of glass wool to hold the desiccant in place. The desiccant is renewed when three-quarters spent, as indicated by color change.

(iii) Collection tubing—stainless steel or aluminum, 5/16 inch ID, for connecting the collection traps to the fuel system vents.

(iv) Polyvinyl chloride (vinyl) tubing—flexible tubing, 5/16 inch ID, for sealing butt-to-butt joints.

(v) Laboratory tubing—air tight flexible tubing 5/16 inch ID, attached to the outlet end of the drying tubes to equalize collection system pressure.

(vi) Clamps—hosecock, open side, for pinching off flexible tubing.

(c) *Weighing equipment.* The balance and weights used shall be capable of determining the net weight of the activated carbon trap within an accuracy of ±75 mg.

(d) *Temperature measuring equipment.* (1) Temperature recorder—multi-channel, variable speed, potentiometric, or substantially equivalent, recorder with a temperature range of 50° F. to 100° F. and capable of either simultaneous or sequential recording of the ambient air and fuel temperatures within an accuracy of ±1° F.

(2) Fuel tank thermocouples—iron-constantan (type J) construction.

(3) Other types of thermocouples and recording equipment may be used pro-

vided they record the information specified in subparagraph (1) of this paragraph with the required accuracy and are self-contained. Type J thermocouples are required to be compatible with recording instruments used in Federal certification facilities.

(e) *Assembly and use of the activated carbon vapor collection system.* (1) The prepared activated carbon trap, dried to constant weight, cooled to the ambient temperature and sealed with clamped sections of vinyl tubing is carefully weighed to the nearest 20 milligrams and the weight recorded as the "tare weight."

(2) A drying tube is attached to the outlet tube and the clamp released, but not removed. A length of flexible tubing, for pressure equalization, is connected to the other end of the drying tube.

(3) The inlet tube of the adsorption trap and external vent(s) of the fuel system will be connected by minimal lengths of stainless steel or aluminum tubing and short sections of vinyl tubing. Butt-to-butt joints shall be made wherever possible and precautions taken against sharp bends in the connection lines, including any manifold systems employed to connect multiple vents to a single trap.

(4) The clamp on the inlet tube of the trap shall be released but not removed. Care shall be exercised to prevent heating the vapor collection trap by radiant or conductive heat from the engine.

(5) Upon completion of the collection sequence, the vinyl tubing sections on each arm of the collection trap shall be clamped tight and the collection system dismantled.

(6) The sealed vapor collection trap shall be weighed carefully to the nearest 20 milligrams. This constitutes the "gross weight," which is appropriately recorded. The difference between the "gross weight" and "tare weight" represents the "net weight" for purposes of calculating the fuel vapor losses.

§ 85.83 Information to be recorded.

The following information shall be recorded with respect to each test:

(a) Test number.

(b) System or device tested (brief description).

(c) Date and time of day for each part of the test-schedule.

(d) Instrument operator.

(e) Driver or operator.

(f) Vehicle: Make—Vehicle identification number—Model year—Transmission type—Odometer reading—Engine displacement—Engine family—Idle r.p.m.—Nominal fuel tank capacity and location on vehicle—Number of carburetors—Number of carburetor barrels—Inertia loading—Actual road load HP. at 50 m.p.h. and drive wheel tire pressure.

(g) Dynamometer serial number and indicated road load power absorption at 50 m.p.h.

(h) All pertinent instrument information such as tuning—gain—serial numbers—detector numbers—range.

(i) Recorder charts: Identify zero, span, exhaust gas, and dilution air sample traces.

(j) Barometric pressure, ambient temperature and humidity and the temperature of the air in front (from 6 to 12 inches from the grill) of the radiator during the test.

(k) Fuel temperatures, as prescribed.

(l) The temperature and pressure of the mixture of exhaust and dilution air entering the positive displacement pump and the pressure increases across the pump. The temperature of the mixture shall be recorded continuously or digitally at a rate often enough to determine temperature variations, or it may be controlled to ±5° F. of the set point of the temperature control system. In the last case only the set point need be recorded.

(m) The number of revolutions of the positive displacement pump accumulated while the test is in progress and exhaust flow samples are being collected.

(n) The humidity of the dilution air.

§ 85.84 Analytical system calibration and sample handling.

(a) Calibrate the analytical assembly at least once every 30 days. Use the same flow rate as when analyzing samples.

(1) Adjust analyzers to optimize performance.

(2) Zero the hydrocarbon analyzer with zero grade air and the carbon monoxide, carbon dioxide, and oxides of nitrogen analyzers with zero grade nitrogen. The allowable zero gas impurity concentrations should not exceed 1 p.p.m. equivalent carbon response, 1 p.p.m. carbon monoxide, 300 p.p.m. (0.03 mole percent) carbon dioxide, and 0.1 p.p.m. nitric oxide.

(3) Set the CO and CO₂ analyzer gains to give the desired ranges. Select the desired attenuation scale of the HC analyzer and set the sample capillary flow rate, by adjusting the back pressure regulator, to give the desired range. Select the desired scale of the NO_x analyzer and adjust the phototube high voltage supply to give the desired range.

(4) Calibrate the HC analyzer with propane (air diluent) gases having nominal concentrations equal to 50 and 100 percent of full scale. Calibrate the CO analyzer with carbon monoxide (nitrogen diluent) gases and the CO₂ analyzer with carbon dioxide (nitrogen diluent) gases having nominal concentrations equal to 10, 25, 40, 50, 60, 70, 85, and 100 percent of full scale. Calibrate the NO_x analyzer with nitric oxide (nitrogen diluent) gases having nominal concentrations equal to 50 and 100 percent of full scale. The actual concentrations should be known to within ±2 percent of the true values.

(5) Compare values obtained on the CO and CO₂ analyzers with previous calibration curves. Any significant change reflects some problem in the system. Locate and correct problem, and recalibrate. Use best judgment in selecting curves for data reduction.

(6) Check the NO_x to NO converter efficiency by the following procedure:

(1) Fill a new (not previously used to collect exhaust gas samples) sample bag with air (or oxygen) and NO span gas in proportions which result in a mix in

the operating range of the analyzer. Provide enough oxygen for substantial conversion of NO to NO₂.

(ii) Knead bag and immediately connect the bag to the sample inlet and alternately measure the NO and NO₂ concentration at 1-minute intervals by alternately passing the sample through the converter and the bypass (close valves N6 and N10 to minimize pump down rate of bag). After several minutes of operation, the recording of NO and NO₂ will resemble Figure 1c if the converter is efficient. Even though the amount of NO₂ increases with time, the total NO_x (NO+NO₂) remains constant. A decay of NO₂ with time indicates the converter is not essentially 100 percent efficient and the cause should be determined before the instrument is used.

(iii) The converter efficiency should be checked at least once weekly and preferably once daily.

(b) HC, CO, CO₂, and NO_x measurements: Allow a minimum of 20 minutes warmup for the HC analyzer and 2 hours for the CO, CO₂, and NO_x analyzers. (Power is normally left on infrared and chemiluminescence analyzers; but when not in use, the chopper motors of the infrared analyzers are turned off and the phototube high voltage supply of the chemiluminescence analyzer is placed in the standby position.) The following sequence of operations should be performed in conjunction with each series of measurements:

(1) Zero the analyzers. Obtain a stable zero on each amplifier meter and recorder. Recheck after tests.

(2) Introduce span gases and set the CO and CO₂ analyzer gains, the HC analyzer sample capillary flow rate and the NO_x analyzer high voltage supply to match the calibration curves. In order to avoid corrections, span and calibrate at the same flow rates used to analyze the test samples. Span gases should have concentrations equal to approximately 80 percent of full scale. If gain has shifted significantly on the CO or CO₂ analyzers, check tuning. If necessary, check calibration. Recheck after test. Show actual concentrations on chart.

(3) Check zeros; repeat the procedure in subparagraphs (1) and (2) of this paragraph if required.

(4) Check flow rates and pressures.

(5) Measure HC, CO, CO₂, and NO_x concentrations of samples. Care should be exercised to prevent moisture from condensing in the sample collection bag.

(6) Check zero and span points.

(c) For the purposes of this section, the term "zero grade air" includes artificial "air" consisting of a blend of nitrogen and oxygen with oxygen concentrations between 18 and 21 mole percent.

§ 85.85 Dynamometer test runs.

(a) The vehicle shall be allowed to stand with the engine turned off for a period of not less than 12 hours before the cold start exhaust emission test, at an ambient temperature as specified in §§ 85.73 and 85.74. The vehicle shall

be stored prior to the emission tests in such a manner that precipitation (e.g. rain or dew) does not occur on the vehicle. The complete dynamometer test consists of a cold start drive of 7.5 miles and simulates a hot start drive of 7.5 miles. The vehicle is allowed to stand on the dynamometer during the 10-minute time period between the cold and hot start tests. The cold start test is divided into two periods. The first period, representing the cold start "transient" phase, terminates at the end of the deceleration which is scheduled to occur at 505 seconds of the driving schedule. The second period, representing the "stabilized" phase, consists of the remainder of the driving schedule including engine shut-down. The hot start test similarly consists of two periods. The first period, representing the hot start "transient" phase, terminates at the same point in the driving schedule as the first phase of the cold start test. The second period of the hot start test, "stabilized" phase, is assumed to be identical to the second period of the cold start test. Therefore, the hot start test terminates after the first period (505 seconds) is run. During the tests the ambient temperature shall be between 68° F. and 86° F.

(b) The following steps shall be taken for each test:

(1) Place drive wheels of vehicle on dynamometer without starting engine.

(2) Open the vehicle engine compartment cover and start the cooling fan.

(3) With the sample solenoid valves in the "dump" position connect evacuated sample collection bags to the two dilute exhaust sample connectors and the dilution air sample line connector.

(4) Start the positive displacement pump, the sample pumps and the temperature recorder. (The heat exchanger of the constant volume sampler should be preheated to its operating temperature before the test begins.)

(5) Adjust the sample flow rates to the desired flow rate (minimum of 10 c.f.h.) and set the revolution counters to zero.

(6) Attach the flexible exhaust tube to the vehicle tailpipe(s).

(7) Simultaneously start the revolution counter for the positive displacement pump, position the sample solenoid valves to direct the sample flows into the "transient" exhaust sample bag and the dilution air sample bag, and start cranking the engine.

(8) Fifteen seconds after the engine starts, place the transmission in gear.

(9) Twenty seconds after the engine starts, begin the initial vehicle acceleration of the driving schedule.

(10) Operate the vehicle according to the dynamometer driving schedule (§ 85.75).

(11) At the end of the deceleration which is scheduled to occur at 505 seconds, simultaneously switch the dilute exhaust sample flow from the "transient" bag to the "stabilized" bag, switch off revolution counter No. 1 and start counter No. 2. Immediately disconnect the

"transient" sample bag, transfer to the analytical system and process according to § 85.84 as soon as practical and in no case longer than 10 minutes after the end of this portion of the test.

(12) Turn the engine off 2 seconds after the end of the last deceleration (at 1,369 seconds).

(13) Five seconds after the engine stops running, simultaneously turn off revolution counter No. 2 and position the sample solenoid valve to the "dump" position. Immediately disconnect the "stabilized" exhaust and dilution air sample bags, transfer to analytical system and process samples according to § 85.84 as soon as practicable and in no case longer than 10 minutes after the end of this portion of the dynamometer test.

(14) Immediately after the end of the sample period, disconnect the exhaust tube from the tailpipe(s), turn off the cooling fan and close the engine compartment cover.

(15) Turn off the positive displacement pump.

(16) Repeat the steps in subparagraphs (2) through (10) of this paragraph for the hot start test except only one evacuated sample bag is required for sampling exhaust gas. The step in subparagraph (7) of this paragraph shall begin 9 and 11 minutes after the end of the sample period for the cold start test.

(17) At the end of the deceleration which is scheduled to occur at 505 seconds, simultaneously turn off the No. 1 revolution counter and position the sample solenoid valve to the "dump" position. (Engine shutdown is not part of the hot start test sample period.)

(18) Immediately disconnect the "transient" exhaust and dilution air sample bags, transfer to analytical system and process samples according to § 85.84 as soon as practicable and in no case longer than 10 minutes after the end of this portion of the dynamometer test.

(19) Disconnect the exhaust tube from the vehicle tailpipe(s) and remove vehicle from dynamometer.

(20) Turn off the positive displacement pump.

§ 85.86 Chart reading.

(a) Determine the HC, CO, CO₂, and NO_x concentrations of the dilution air and dilute exhaust sample bags from the instrument deflections or recordings making use of appropriate calibration charts.

(b) Determine the average dilute exhaust mixture temperatures from the temperature recorder trace if a recorder is used.

§ 85.87 Calculations (exhaust emissions).

The final reported test results shall be computed by use of the following formulae:

(a) For light duty vehicles:

$$Y_{wm} = (0.43 Y_{c1} + 0.57 Y_{c2} + Y_{c3}) / 7.5$$

where:

Y_{wm} = Weighted mass emissions of each pollutant, i.e. HC, CO, or NO_x , in grams per vehicle mile.

Y_{ct} = Mass emissions as calculated from the "transient" phase of the cold start test, in grams per test phase.

Y_{ht} = Mass emissions as calculated from the "transient" phase of the hot start test, in grams per test phase.

Y_s = Mass emissions as calculated from the "stabilized" phase of the cold start test, in grams per test phase.

(b) The mass of each pollutant for each phase of both the cold start test and the hot start test is determined from the following:

(1) Hydrocarbon Mass:

$$HC_{mass} = V_{mix} \times \text{Density}_{HC} \times \frac{HC_{conc}}{1,000,000}$$

(2) Oxides of nitrogen Mass:

$$NO_{x_{mass}} = V_{mix} \times \text{Density}_{NO_x} \times \frac{NO_{x_{conc}}}{1,000,000} \times K_H$$

(3) Carbon monoxide Mass:

$$CO_{mass} = V_{mix} \times \text{Density}_{CO} \times \frac{CO_{conc}}{1,000,000}$$

(c) Meaning of symbols:

HC_{mass} = Hydrocarbon emissions, in grams per test phase.

Density_{HC} = Density of hydrocarbons in the exhaust gas, assuming an average carbon to hydrogen ratio of 1:1.85, in grams per cubic foot at 68° F. and 760 mm. Hg pressure (16.33 gm./cu. ft.).

HC_{conc} = Hydrocarbon concentration of the dilute exhaust sample corrected for background, in p.p.m. carbon equivalent, i.e. equivalent propane $\times 3$.

$HC_{conc} = HC_s - HC_d (1 - 1/DF)$

where:

HC_s = Hydrocarbon concentration of the dilute exhaust sample as measured, in p.p.m. carbon equivalent.

HC_d = Hydrocarbon concentration of the dilution air as measured, in p.p.m. carbon equivalent.

$NO_{x_{mass}}$ = Oxides of nitrogen emissions, in grams per test phase.

Density_{NO_x} = Density of oxides of nitrogen in the exhaust gas, assuming they are in the form of nitrogen dioxide, in grams per cubic foot at 68° F. and 760 mm. Hg pressure (54.16 gm./cu. ft.).

$NO_{x_{conc}}$ = Oxides of nitrogen concentration of the dilute exhaust sample corrected for background, in p.p.m.

$NO_{x_{conc}} = NO_{x_s} - NO_{x_d} (1 - 1/DF)$

where:

NO_{x_s} = Oxides of nitrogen concentration of the dilute exhaust sample as measured, in p.p.m.

NO_{x_d} = Oxides of nitrogen concentration of the dilution air as measured, in p.p.m.

CO_{mass} = Carbon monoxide emissions, in grams per test phase.

Density_{CO} = Density of carbon monoxide in grams per cubic foot at 68° F. and 760 mm. Hg pressure (32.97 gm./cu. ft.).

CO_{conc} = Carbon monoxide concentration of the dilute exhaust sample corrected for background, water vapor and CO_2 extraction, in p.p.m.

$CO_{conc} = CO_s - CO_d (1 - 1/DF)$

where:

CO_s = Carbon monoxide concentration of the dilute exhaust sample volume corrected for water vapor and carbon dioxide extraction, in p.p.m. The calculation assumes the hydrogen-carbon ratio of the fuel is 1.85:1.

$CO_s = (1 - 0.01925 CO_{x_s} - 0.000323 R) CO_{e_{m}}$

where:

$CO_{e_{m}}$ = Carbon monoxide concentration of the dilute exhaust sample as measured, in p.p.m.

CO_2 = Carbon dioxide concentration of the dilute exhaust sample, in mole percent.

R = Relative humidity of the dilution air, in percent.

CO_d = Carbon monoxide concentration of the dilution air corrected for water vapor extraction, in p.p.m.

$CO_d = (1 - 0.000323 R) CO_{e_{m}}$

where:

$CO_{e_{m}}$ = Carbon monoxide concentration of the dilution air sample as measured, in p.p.m.

$$DF = \frac{13.4}{CO_2 + (HC_s + CO_s) \times 10^{-4}}$$

V_{mix} = Total dilute exhaust volume in cubic feet per test phase corrected to standard conditions (528° R and 760 mm. Hg).

$V_{mix} = V_s \times N (P_p/760 \text{ mm. Hg}) (528^\circ R/T_p)$

where:

V_s = Volume of gas pumped by the positive displacement pump, in cubic cubic feet per revolution. This volume is dependent on the pressure differential across the positive displacement pump.

N = Number of revolutions of the positive displacement pump during the test phase while samples are being collected.

P_p = Absolute pressure of the dilute exhaust entering the positive displacement pump, in mm. HG, i.e. barometric pressure minus the pressure depression below atmospheric of the mixture entering the positive displacement pump.

T_p = Average temperature of dilute exhaust entering positive displacement pump during test while samples are being collected, in degrees Rankine.

K_H = Humidity correction factor.

$$K_H = \frac{1}{1 - 0.0047 (H - 75)}$$

where:

H = Absolute humidity in grains of water per pound of dry air.

(d) Example calculation of mass emission values:

(1) For the "transient" phase of the cold start test assume $V_s = 0.29344$ cu. ft. per revolution; $N = 10,485$; $R = 48$ percent; $H = 62$ grains per pound of dry air; $P_p = 692$ mm. Hg; $T_p = 570^\circ R$; $HC_s = 105.8$ p.p.m. carbon equivalent; $NO_{x_s} = 11.2$ p.p.m.; $CO_{e_{m}} = 306.6$ p.p.m.; $CO_2 = 1.43$ percent; $HC_d = 12.1$ p.p.m.; $NO_{x_d} = 0.8$ p.p.m.; $CO_{e_{m}} = 15.3$ p.p.m.

Then:

$$V_{mix} = (0.29344) (10,485) (692/760) (528/570) = 2595.0 \text{ cu. ft. per test phase.}$$

$$K_H = \frac{1}{1 - 0.0047 (62 - 75)} = 0.9424$$

$$CO_s = (1 - 0.01925 (1.43) - 0.000323 (48)) 306.6 = 293.4 \text{ p.p.m.}$$

$$CO_d = (1 - 0.000323 (48)) 15.3 = 15.1 \text{ p.p.m.}$$

$$DF = \frac{13.4}{1.43 + (105.8 + 293.4) \times 10^{-4}} = 9.116$$

$$HC_{conc} = 105.8 - 12.1 (1 - 1/9.116) = 95.03$$

$$HC_{mass} = (2595) (16.33) (95.03/1,000,000) = 4.027 \text{ grams per test phase.}$$

$$NO_{x_{conc}} = 11.2 - 0.8 (1 - 1/9.116) = 10.49$$

$$NO_{x_{mass}} = (2595) (54.16) (10.49/1,000,000) (0.9424) = 1.389 \text{ grams per test phase.}$$

$$CO_{conc} = 293.4 - 15.3 (1 - 1/9.116) = 279.8$$

$$CO_{mass} = (2595) (32.97) (279.8/1,000,000) = 23.94 \text{ grams per test phase.}$$

(2) For the "stabilized" portion of the cold start test assume that similar calculations resulted in $HC_{mass} = 0.62$ grams per test phase; $NO_{x_{mass}} = 1.27$ grams per test phase; and $CO_{mass} = 5.98$ grams per test phase.

(3) For the "transient" portion of the hot start test assume that similar calculations resulted in $HC_{mass} = 0.51$ grams per test phase; $NO_{x_{mass}} = 1.38$ grams per test phase; and $CO_{mass} = 5.01$ grams per test phase.

(4) For a 1975 light duty vehicle:

$$HC_{wm} = ((0.43) (4.027) + (0.57) (0.51) + 0.62) / 7.5 = 0.353 \text{ gram per vehicle mile.}$$

$$NO_{x_{wm}} = ((0.43) (1.389) + (0.57) (1.38) + 1.27) / 7.5 = 0.354 \text{ gram per vehicle mile.}$$

$$CO_{wm} = ((0.43) (23.94) + (0.57) (5.01) + 5.98) / 7.5 = 2.55 \text{ grams per vehicle mile.}$$

§ 85.88 Calculations (fuel evaporative emissions).

The net weights of the individual collection traps employed in § 85.74 shall be added together to determine compliance with the fuel evaporative emission standard.

§ 85.89 Test vehicles.

(a) (1) The vehicles covered by the application for certification will be divided into groupings of vehicles whose engines are expected to have similar emission characteristics. Each group of engines with similar emission characteristics shall be defined as a separate engine family.

(2) To be classed in the same engine family, engines must be identical in all the following respects:

(i) The cylinder bore center to center dimensions.

(ii) The dimension from the centerline of the crankshaft to the centerline of the camshaft.

(iii) The dimension from the centerline of the crankshaft to the top of the cylinder block head face.

(iv) The cylinder block configuration (air-cooled or water-cooled; L-6, 90° V-8, etc.).

(v) The location of intake and exhaust valves and the valve sizes (within a 1/8-inch range on the valve head diameter).

(vi) The method of air aspiration.

(vii) The combustion cycle.

(3) Engines identical in all the respects listed in subparagraph (2) of this paragraph may be further divided into

different engine families if the Administrator determines that they may be expected to have different emission characteristics. This determination will be based upon a consideration of the following features of each engine:

- (i) The bore and stroke.
- (ii) The surface to volume ratio of the nominally dimensioned cylinder at the top dead center position.
- (iii) The intake manifold induction port size and configuration.
- (iv) The exhaust manifold port size and configuration.
- (v) The intake and exhaust valve sizes.
- (vi) The fuel system.
- (vii) The camshaft timing and ignition timing characteristics.

(4) Where engines are of a type which cannot be divided into engine families based upon the criteria listed in subparagraphs (2) and (3) of this paragraph, the Administrator will establish families for those engines based upon the features most related to their emission characteristics.

(b) Emission data vehicles:

(1) Vehicles will be chosen to be operated and tested for emission data based upon the engine family groupings. Within each engine family, the requirements of this paragraph must be met.

(2) Vehicles of each engine family will be divided into engine displacement-exhaust emission control system- evaporative emission control system combinations. A projected sales volume will be established for each combination for the model year for which certification is sought. One vehicle of each combination will be selected in order of decreasing projected sales volume until 70 percent of the projected sales of a manufacturer's total production of vehicles of that engine family is represented, or until a maximum of four vehicles is selected. If any single combination represents over 70 percent, then two vehicles of that combination will be selected. The vehicle selected for each combination will be specified by the Administrator as to transmission type, fuel system and inertia weight class.

(3) The Administrator may select a maximum of four additional vehicles within each engine family based upon features indicating that they may have the highest emission levels of the vehicles in that engine family. In selecting these vehicles, the Administrator will consider such features as the emission control system combination, induction system characteristics, ignition system characteristics, fuel system, rated horsepower, rated torque, compression ratio, inertia weight class, transmission options and axle ratios.

(4) If the vehicles selected in accordance with subparagraphs (2) and (3) of this paragraph do not represent each engine-system combination, then one vehicle of each engine-system combination not represented will be selected by the Administrator. The vehicle selected shall be of the engine displacement with the largest projected sales volume of vehicles with the control system combina-

tion in the engine family and will be designated by the Administrator as to transmission type, fuel system and inertia weight class.

(c) Durability data vehicles:

(1) A durability data vehicle will be selected by the Administrator to represent each engine-system combination. The vehicle selected shall be of the engine displacement with the largest projected sales volume of vehicles with that control system combination in that engine family and will be designated by the Administrator as to transmission type, fuel system and inertia weight class.

(2) If an exhaust emission control system-fuel evaporative emission control system combination is used in only one engine family, an additional vehicle using that combination in that family will be selected so that the durability data fleet shall contain at least two vehicles with each combination. The additional vehicle will be selected in the same manner as vehicles selected under subparagraph (1) of this paragraph.

(3) A manufacturer may elect to operate and test additional vehicles to represent any engine-system combination. The additional vehicles must be of the same engine displacement, transmission type, fuel system and inertia weight class as the vehicle selected for that engine-system combination in accordance with the provisions of subparagraph (1) of this paragraph. Notice of an intent to operate and test additional vehicles shall be given to the Administrator not later than 30 days following notification of the test fleet selection.

(d) For purposes of testing under § 85.91(g), the Administrator may require additional emission data vehicles and durability data vehicles identical in all material respects to vehicles selected in accordance with paragraphs (b) and (c) of this section: *Provided*, That the number of vehicles selected shall not increase the size of either the emission data fleet or the durability data fleet by more than 20 percent or one vehicle, whichever is greater.

(e) Any manufacturer whose projected sales of new motor vehicles subject to this subpart for the model year for which certification is sought is less than 2,000 vehicles may request a reduction in the number of test vehicles determined in accordance with the foregoing provisions of this section. The Administrator may agree to such lesser number as he determines would meet the objectives of this procedure.

(f) In lieu of testing an emission data or durability data vehicle selected under paragraph (b) or (c) of this section, and submitting data therefor, a manufacturer may, with the prior written approval of the Administrator, submit data on a similar vehicle for which certification has previously been obtained.

(g) (1) Where it is expected that more than 33 percent of an engine family will be equipped with an optional item, the full estimated weight of that item shall be included in the curb weight computation for the entire engine family. Where it is expected that 33 percent

or less of the vehicles in an engine family will be equipped with an item of optional equipment, no weight for that item will be added in computing curb weight. Optional equipment weighing less than 3 pounds per item need not be considered.

(2) Where it is expected that more than 33 percent of an engine family will be equipped with an item of optional equipment that can reasonably be expected to influence exhaust or evaporative emissions, then such items of optional equipment shall actually be installed on all emission data and durability data vehicles for such engine family.

§ 85.90 Maintenance.

(a) (1) Maintenance on the engines and fuel systems of durability vehicles may be performed only under the following provisions:

(1) One major engine tuneup to manufacturer's specifications may be performed at 24,000 miles (± 250 miles) of scheduled driving with the following exception: On a vehicle with an engine displacement of 150 cubic inches or less (or a rating of at least 1.20 maximum rated horsepower per cubic inch of displacement) major engine tuneups may be performed at 12,000, 24,000, and 36,000 miles (± 250 miles) of scheduled driving. A major engine tuneup shall be restricted to the following:

- (a) Replace spark plugs.
- (b) Inspect ignition wiring and replace as required.
- (c) Replace distributor breaker points and condenser as required.
- (d) Lubricate distributor cam.
- (e) Check distributor advance and breaker point dwell angle and adjust as required.
- (f) Check automatic choke for free operation and correct as required.
- (g) Adjust carburetor idle speed and mixture.
- (h) Adjust drive belt tension on engine accessories.
- (i) Adjust valve lash if required.
- (j) Check exhaust heat control valve for free operation.
- (k) Check engine bolt torque and tighten as required.
- (l) Spark plugs may be changed if a persistent misfire is detected.
- (m) Normal vehicle lubrication services (engine and transmission oil change and oil filter, fuel filter, and air filter servicing) will be allowed at manufacturer's recommended intervals.
- (n) The crankcase emission control system may be serviced at 12,000-mile intervals (± 250 miles) of scheduled drivings.
- (o) The fuel evaporative emission control system may be serviced at 12,000-mile intervals (± 250 miles) of scheduled driving.
- (p) Readjustment of the engine choke mechanism or idle settings may be performed only if there is a problem of stalling at stops.
- (q) Leaks in the fuel system, engine lubrication system and cooling system may be repaired.

(viii) Engine idle speed may be adjusted at the 4,000-mile test point.

(ix) Any other engine or fuel system maintenance or repairs will be allowed only with the advance approval of the Administrator.

(2) Repairs to vehicle components of the durability data vehicle, other than the engine or fuel system, shall be performed only as a result of part failure or vehicle system malfunction.

(3) Allowable maintenance on emission data vehicles shall be limited to the adjustment of engine idle speed at the 4,000-mile test point.

(4) Where the Administrator agrees under § 85.91 to a mileage accumulation of less than 50,000 miles for durability testing, he may modify the requirements of this paragraph.

(b) Complete emission tests (see §§ 85.71-85.88) shall be run before and after any vehicle maintenance which may reasonably be expected to affect emissions. These test data shall be supplied to the Administrator immediately after the tests, along with a complete record of all pertinent maintenance, including an engineering report of any malfunction diagnosis and the corrective action taken. In addition, all test data and maintenance reports shall be compiled and provided to the Administrator in accordance with § 85.53.

(c) If the Administrator determines that maintenance or repairs performed have resulted in a substantial change to the engine-system combination, the vehicle shall not be used as a durability data vehicle.

§ 85.91 Mileage accumulation and emission measurements.

The procedure for mileage accumulation will be the Durability Driving Schedule as specified in Appendix D to this part. A modified procedure may also be used if approved in advance by the Administrator.

(a) Emission data vehicles: Each emission data vehicle shall be driven 4,000 miles with all emission control systems installed and operating. Emission tests shall be conducted at zero miles and 4,000 miles.

(b) Durability data vehicles: Each durability data vehicle shall be driven, with all emission control systems installed and operating, for 50,000 miles or such lesser distance as the Administrator may agree to as meeting the objectives of this procedure. Emission measurements from a cold start shall be made at zero miles and at each 4,000-mile interval.

(c) All tests required by this subpart to be conducted after 4,000 miles of driving or at any multiple of 4,000 miles may be conducted at any accumulated mileage within 250 miles of 4,000 miles or the appropriate multiple of 4,000 miles, respectively.

(d) The results of each emission test shall be supplied to the Administrator immediately after the test. Where a manufacturer conducts multiple tests at any test point or any tests between test

points, data on these tests (including voided tests) shall be provided immediately to the Administrator. In addition, all test data shall be compiled and provided to the Administrator in accordance with § 85.53.

(e) Whenever the manufacturer proposes to operate and test a vehicle which may be used for emission or durability data, he shall provide the zero mile test data to the Administrator and make the vehicle available for such testing under § 85.54 as the Administrator may require before beginning to accumulate mileage on the vehicle. Failure to comply with this requirement will invalidate all test data submitted for this vehicle.

(f) Once a manufacturer begins to operate an emission data or durability data vehicle, as indicated by compliance with paragraph (e) of this section, he shall continue to run the vehicle to 4,000 miles or 50,000 miles, respectively, and the data from the vehicle will be used in the calculations under § 85.92. Discontinuation of a vehicle shall be allowed only with the written consent of the Administrator.

(g) (1) The Administrator may elect to operate and test any test vehicle during all or any part of the mileage accumulation and testing procedure. In such cases, the manufacturer shall provide the vehicle(s) to the Administrator with all information necessary to conduct this testing.

(2) The test procedures in §§ 85.71-85.88 will be followed by the Administrator. The Administrator will test the vehicles at each test point. Maintenance may be performed by the manufacturer under such conditions as the Administrator may prescribe.

(3) The data developed by the Administrator for the engine-system combination shall be combined with any applicable data supplied by the manufacturer on other vehicles of that combination to determine the applicable deterioration factors for the combination. In the case of a significant discrepancy between data developed by the Administrator and that submitted by the manufacturer, the Administrator's data shall be used in the determination of deterioration factors.

$$\text{factor} = \frac{\text{exhaust emissions interpolated to 50,000 miles}}{\text{exhaust emissions interpolated to 4,000 miles}}$$

(iv) An evaporative emission deterioration factor shall be calculated for each combination by subtracting the evaporative emissions interpolated to 4,000 miles from the evaporative emissions interpolated to 50,000 miles.

(2) (i) The exhaust emission test results for each emission data vehicle shall be multiplied by the appropriate deterioration factor: *Provided*, That if a deterioration factor as computed in subparagraph (1) (iii) of this paragraph is less than one, that deterioration factor shall be one for the purposes of this subparagraph.

(ii) The evaporative emission test results for each combination shall be ad-

§ 85.92 Compliance with emission standards.

(a) The exhaust and fuel evaporative emission standards in §§ 1201.21 and 1201.22 apply to the emissions of vehicles for their useful life.

(b) Since emission control efficiency decreases with mileage accumulated on the vehicle, the emission level of a vehicle which has accumulated 50,000 miles will be used as the basis for determining compliance with the standards.

(1) Separate emission deterioration factors shall be determined from the emissions results of the durability data vehicles for each engine-system combination. A separate factor shall be established for the combination for exhaust HC, exhaust CO, exhaust NO_x, and fuel evaporative HC.

(i) The applicable results to be used in determining the deterioration factors for each combination shall be:

(a) All emission data from the tests required under § 85.91(b), except the zero mile tests. This shall include the official test results, as determined in § 85.54, for all tests conducted on all durability vehicles of the combination selected under § 85.89(c), (including all vehicles elected to be operated by the manufacturer under § 85.89(c)(3)). Where the Administrator has agreed to a mileage less than 50,000 miles in accordance with § 85.91(b), the data for mileages greater than that actually run will be determined by extrapolating the test data generated at lesser mileages.

(b) All emission data from the tests conducted before and after the maintenance provided in § 85.90(a)(1)(i).

(ii) All applicable results shall be plotted as a function of the mileage on the system, rounded to the nearest mile, and the best fit straight lines, fitted by the method of least squares, shall be drawn through these data points. The interpolated 4,000- and 50,000-mile points on this line must be within the standards provided in §§ 85.21 and 85.22 or the data will not be acceptable for use in calculation of a deterioration factor.

(iii) An exhaust emission deterioration factor shall be calculated for each combination as follows:

justed by addition of the appropriate deterioration factor: *Provided*, That if a deterioration factor as computed in subparagraph (1) (iv) of this paragraph is less than zero, that deterioration factor shall be zero for the purposes of this subparagraph.

(3) The emissions to compare with the standard shall be the adjusted emissions of subparagraph (2) (i) and (ii) of this paragraph for each emission data vehicle.

(4) Every test vehicle of an engine family must comply with all applicable standards, as determined in subparagraph (3) of this paragraph, before any vehicle in that family may be certified.

Subpart I—Test Procedures for Engine Exhaust Emissions (Gasoline Fueled Heavy Duty Engines)

§ 85.100 Introduction.

The procedures described in this subpart will be the test program to determine the conformity of new gasoline fueled heavy duty engines with the applicable standards set forth in this part.

(a) The test consists of prescribed sequences of engine operating conditions to be conducted on an engine dynamometer. The exhaust gases generated during engine operation are sampled continuously for specific component analysis through the analytical train. The test is applicable to engines equipped with catalytic or direct-flame afterburners, induction system modifications, or other systems, or to uncontrolled engines.

(b) The exhaust emission test is designed to determine hydrocarbon and carbon monoxide concentrations during a truck driving pattern in a metropolitan area as simulated on an engine dynamometer. The test consists of two warm-up cycles and two hot cycles. The average concentrations for the warm-up cycles and the hot cycles are combined to yield the reported values.

(c) When an engine is tested for exhaust emissions or is operated for durability testing on an engine dynamometer the complete engine shall be used with all accessories which might reasonably be expected to influence emissions to the atmosphere installed and functioning.

§ 85.101 Gasoline fuel specifications.

(a) For exhaust emission testing, fuel having specifications as shown in the table in § 85.71(a), or substantially equivalent specifications approved by the Administrator, shall be used.

(b) For durability testing, fuel having specifications as shown in the table in § 85.71(b), or substantially equivalent specifications approved by the Administrator, shall be used. The octane rating of the fuel used shall be in the range recommended by the engine manufacturer. The specifications of the fuel to be used shall be reported in accordance with § 85.51(b) (3).

§ 85.102 Dynamometer operation cycle and equipment.

(a) (1) The following nine-mode cycle shall be followed in dynamometer operation tests of gasoline fueled heavy duty engines.

Sequence No.	Mode	Manifold vacuum	Time in Mode—Secs.	Cumulative Time—Secs.	Weighting factors
1	Idle	.....	70	70	0.095
2	Cruise	15" Hg	35	105	.089
3	P.T.A.	15" Hg	44	149	.257
4	Cruise	15" Hg	25	174	.089
5	P.T.D.	15" Hg	17	191	.047
6	Cruise	15" Hg	23	214	.089
7	FL	3" Hg	34	248	.283
8	Cruise	15" Hg	25	273	.089
9	OT	.....	45	318	.021

(2) The engine dynamometer shall be operated at a constant speed of 2,000 r.p.m.±100 r.p.m. (exception: representative engine speed for a given displacement engine as determined by its application, but not less than 1,800 r.p.m. nor greater than 2,500 r.p.m.).

(3) The idle operating mode shall be carried out at the manufacturer's recommended engine speed. The OT operating mode shall be carried out at the same engine speed as in subparagraph (2) of this paragraph.

(b) The following equipment shall be used for dynamometer tests.

(1) An engine dynamometer capable of maintaining constant speed±100 r.p.m. from full throttle to closed throttle motoring.

(2) A chassis-type exhaust system or substantially equivalent exhaust system, shall be used.

(3) A radiator typical of that used with the engine in a vehicle, or other means of engine cooling which will maintain the engine operating temperatures

at approximately the same temperature as would the radiator, shall be used. An auxiliary fixed speed fan may be used to maintain engine cooling during sustained operation on the dynamometer.

§ 85.103 Dynamometer procedures.

An initial 5-minute idle, two warm-up cycles, and two hot cycles constitute a complete dynamometer run. Idle modes may be run at the beginning and end of each test, thus eliminating the need to change speed between cycles. One idle mode preceding the first cycle and one

following the fourth cycle is sufficient. The results of the first idle shall be used for calculation of the second cycle emissions and the fourth idle results shall be used for calculation of the third cycle emissions.

§ 85.104 Sampling and analytical system for measuring exhaust emissions.

(a) Schematic drawing. The following (fig. 6) is a schematic drawing of the exhaust gas sampling and analytical system which shall be used for testing under the regulations in this subpart.

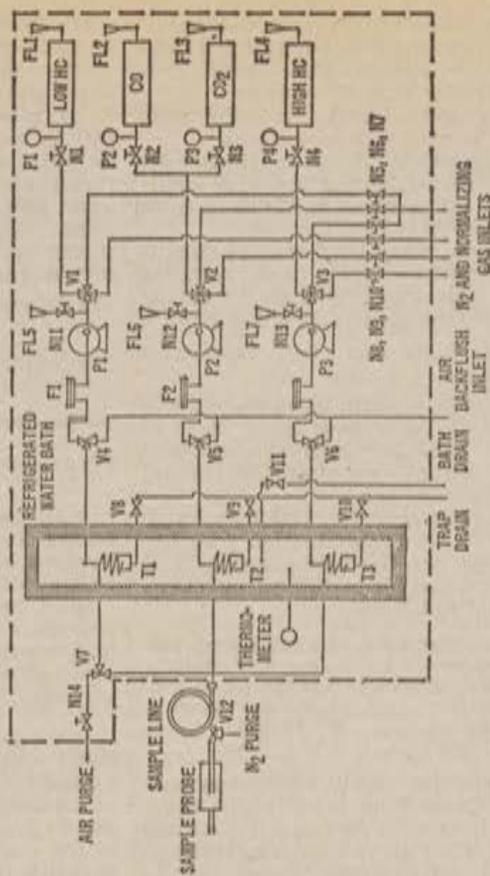


Figure 6. Flow schematic of exhaust gas analysis system employed in Federal facilities.

(b) Component description. The following components shall be used in sampling and analytical systems for testing under the regulations in this part.

(1) Flowmeters FL1, FL2, FL3, and FL4 indicate the sample flow rate through the analyzers.

(2) Low range hydrocarbon analyzer.

(3) Carbon monoxide analyzer.

(4) Carbon dioxide analyzer.

(5) High range hydrocarbon analyzer.

(6) Pressure gauges P1, P2, and P3 indicate the analyzer sample pressure.

(7) Needle valves N1, N2, N3, and N4 regulate sample flow rate to the analyzers.

(8) Needle valves N5, N6, N7, N8, N9, and N10 regulate the flow rates of N₂ and normalizing gases to the analyzers.

(9) Ball valves V1, V2, and V3 for directing either sample or calibration gases to the analyzers.

(10) Needle valves N11, N12, and N13 regulate the sample flow rate through the bypass network.

(11) Flowmeters FL5, FL6, and FL7 indicate the flow rate through the bypass system.

(12) Pumps P1, P2, and P3 for pulling sample from source.

(13) Filters F1, F2, and F3 remove contaminants from sample prior to analysis.

(14) Ball valves V4, V5, and V6 for directing sample to the analyzer or directing air in the reverse direction as a backflush.

(15) Toggle valves V8, V9, V10, and V11 for draining condensate traps and refrigerated bath.

(16) Traps T1, T2, and T3 for condensing water vapor and cooling exhaust sample.

(17) Ball valve V7 for diverting air to low HC analyzer during periods of high hydrocarbon response.

(18) Needle valve N14 for regulating air flow to low hydrocarbon analyzer during purge conditions.

(19) Thermometer for indicating bath temperature.

(20) Refrigerated water bath for condensing water vapor and cooling exhaust sample.

(21) Sample line from vehicle to analysis system.

(22) Sample probe to extract exhaust gas sample downstream of muffler.

(23) Ball valve V12 for directing N₂ to hydrocarbon analyzers.

(c) *Hang up reduction.* Stringent methods to reduce hang up may be employed. All methods must be approved in advance by the Administrator.

§ 85.105 Information to be recorded on charts.

The following information shall be recorded with respect to each test:

- Test number.
- System tested (brief description).
- Date and time of day for each part of the test schedule.
- Instrument Operator.
- Driver or Operator.
- Engine Make—identification number—date of manufacture—number of hours—engine displacement—engine

family—idle r.p.m.—number of carburetors—number of carburetor venturis.

(g) All pertinent instrument information such as tuning—gain—serial numbers—detector numbers—range.

(h) Recorder Charts: Identify zero, span, exhaust gas sample traces.

(i) Barometric pressure, intake air temperature and humidity and, as applicable, the temperature of the air in front of the radiator during the test.

(j) A continuous trace of intake manifold vacuum and engine r.p.m., recorded on the same chart with an automatic marker indicating one second intervals.

§ 85.106 Calibration and instrument checks.

(a) The instrument assembly shall be calibrated at least once every 30 days, using the same flow rate as when sampling exhaust and proceeding as follows:

- Tune analyzers.
- Zero on nitrogen: Check each cylinder of N₂ for contamination with hydrocarbons. Set the instrument gain to give the desired range. Normal operating ranges are as follows:

Low-Range Hydrocarbon Analyzer.	0-1,000 p.p.m. hexane equivalent.
High-Range Hydrocarbon Analyzer.	0-10,000 p.p.m. hexane equivalent.
CO Analyzer.	0-10% CO.
CO ₂ Analyzer.	0-16% CO ₂ .

(3) Calibrate with the following normalizing gases. Flow rates should be set at 10 c.f.h. on the hydrocarbon analyzers and 5 c.f.h. on the carbon monoxide and carbon dioxide analyzers. The concentrations given indicate nominal concentrations, and actual concentrations should be known to within ± 2 percent of true value. Prepurified N₂ is used as the diluent.

not in use, chopper motor is turned off.):

(1) Zero on clean nitrogen introduced at analyzer inlet. Obtain a stable zero on the amplifier meter and recorder. Recheck after test.

(2) Introduce normalizing gas and set gain to match calibration curve. In order to avoid a correction for sample cell pressure, normalize and calibrate at the same flow rates used for exhaust sampling. Normalizing or span gases: (See paragraph (a) (3) of this section for allowable variation.)

Low-Range Hydrocarbon Analyzer.	1,000 p.p.m. hexane equivalent in prepurified N ₂ .
High-Range Hydrocarbon Analyzer.	10,000 p.p.m. hexane equivalent in prepurified N ₂ .
CO Analyzer.	10% CO in prepurified N ₂ .
CO ₂ Analyzer.	12 to 16% CO ₂ in prepurified N ₂ .

If gain has shifted significantly, check tuning. If necessary, check calibration. Recheck after test. Record actual concentrations on chart.

(3) Check nitrogen zero, repeat the procedure in subparagraphs (1) and (2) of this paragraph if required.

(4) Check flow rates and pressures.

§ 85.107 Dynamometer test run.

(a) The engine shall be allowed to stand with engine turned off for at least 1 hour before the exhaust emission test at an ambient temperature of 60° F. to 86° F. The engine shall be stored prior to the emission tests in such a manner that it is not exposed to precipitation or condensation. During the dynamometer run, the ambient temperature shall be between 68° F. and 86° F.

(b) The following steps shall be taken for each test:

(1) Mount test engine on the engine dynamometer.

(2) Calibrate exhaust emission analyzer assembly.

(3) Start cooling system, if it is to be used.

(4) Start engine and idle at 1,000-1,200 r.p.m. for 5 minutes.

(5) Obtain normal idle speed, record it, and start exhaust sampling.

(6) Run four 9-mode cycles.

(c) Upon completion of the test, purge the sample line with nitrogen to establish a constant hydrocarbon "hangup" level. The hydrocarbon concentration shall drop to 5 percent of scale in 10 seconds, and 3 percent of scale in 3 minutes, or the test is invalid. Check calibration of exhaust emission instruments. A drift in excess of ± 2 percent of scale in the calibration of any one of the exhaust emission analyzers will invalidate the test results.

§ 85.108 Chart reading.

The recorder response for measuring exhaust gas concentrations always lags the engine's operation because of a variable exhaust system delay and a fixed sample system delay. Therefore, the concentrations for each mode will not be

Low range HC analyzer	High range HC analyzer	CO and CO ₂ analyzers		
Hexane equivalent ¹	Hexane equivalent	Blend of CO and CO ₂ containing:		
		Mole percent CO	Plus	Mole percent CO ₂
100 p.p.m.	600 p.p.m.	0.5		16.0
200 p.p.m.	1,000 p.p.m.	1.0		15.0
300 p.p.m.	1,500 p.p.m.	2.0		14.0
400 p.p.m.	2,500 p.p.m.	3.0		13.0
600 p.p.m.	4,000 p.p.m.	4.0		12.0
800 p.p.m.	6,000 p.p.m.	6.0		10.0
1,000 p.p.m.	8,000 p.p.m.	8.0		8.0
	10,000 p.p.m.	10.0		6.0

¹ The hexane equivalent of propane, when used as the normalizing gas for calibrating nondispersive infrared analyzers, is prescribed to be 0.52 (Propane Concentration $\times 0.52 =$ Hexane Equivalent Concentration).

Minimum storage temperature of the cylinders shall be 60° F.; minimum use temperature shall be 68° F.

(4) Compare values with previous curves. Any significant change reflects some problem in the system. Locate and correct problem, and recalibrate. Use best judgment in selecting curve for data reduction.

(5) Check response of hydrocarbon analyzer to 100 percent CO₂. If response is greater than 0.5 percent full scale, refill filter cells with 100 percent CO₂ and recheck. Note any remaining response on chart. If response still exceeds 0.5 percent, replace detector.

(6) Check response of hydrocarbon analyzers to nitrogen saturated with water at ambient temperature. Record ambient temperature. If the low-range instrument response exceeds 5 percent of full scale with saturated nitrogen at 75° F., replace the detector. If the high-range response exceeds 0.5 percent of full scale, check detector on low-range instrument, then reject if response exceeds 5 percent of full scale at 75° F.

(b) The following daily instrument check shall be performed, allowing a minimum of 2 hours warmup for infrared analyzers. (Power is normally left on continuously; but, when instruments are

located on the charts at a point corresponding to the exact time of the mode. For each warmup or hot cycle to be evaluated, proceed as follows:

(a) Determine whether the cycle was run in accordance with the specified cycle timing by observing either chart pips, speed trace, manifold vacuum trace, or concentration traces. Deviation by more than 2 seconds from the specified time for the closed throttle mode (sequence 9) or deviation of more than $\pm 0.2''$ Hg from the specified mode vacuums during the last 10 seconds of a mode will invalidate the data.

(b) Time correlate the hydrocarbon, carbon monoxide, and carbon dioxide charts. Determine the location on the chart of concentrations corresponding to each mode. Determine and compensate for trace abnormalities.

(c) For all open throttle (3'', 10'', 16'', and 19'' Hg) and idle modes, integrate the last 3 seconds of the HC, CO and CO₂ traces.

(d) The values recorded for the initial idle mode are used for both warmup cycles 1 and 2. The final idle mode values are applied to hot cycles 3 and 4.

(e) Integrate the complete HC, CO, and CO₂ traces during this 43-second closed throttle mode of each cycle.

(f) Direct computer analysis of analyzer output may be utilized provided that the analysis is sufficiently similar to the above procedures to result in comparable data results.

§ 85.109 Calculations.

The final reported test results shall be derived through the following steps:

(a) Determine composite hydrocarbon and carbon monoxide concentrations for the first and second cycles. Average the results of these two cycles.

(b) Determine composite hydrocarbon and carbon monoxide concentrations for the third and fourth cycles. Average the results of these two cycles.

(c) Combine the results of paragraphs (a) and (b) of this section according to the formula: $0.35(a) + 0.65(b)$. Since hydrocarbon, carbon monoxide, and carbon dioxide are all measured with essentially the same moisture content, no moisture correction is required to convert the results to a dry basis. The correction factor:

$$14.5$$

$$\% \text{CO}_2 + (0.5) \% \text{CO} + (1.8 \times 6) \% \text{HC}$$

shall be applied to the measured concentrations of hydrocarbon and carbon monoxide to correct these observed values for dilution of the exhaust.

§ 85.110 Test engines.

(a) The engines covered by the application for certification will be divided into engine families based upon the criteria outlined in § 85.89(a).

(b) Emission data engines:

(1) Engines will be chosen to be run for emission data based upon the engine family groupings. Within each engine family, the requirements of this paragraph must be met.

(2) Engines of each engine family will be divided into engine displacement-exhaust emission control system combinations. A projected sales volume will be established for each combination for the model year for which certification is sought. One engine of each combination will be selected in order of decreasing projected sales volume until 70 percent of the projected sales of a manufacturer's total production of engines of that family is represented, or until a maximum of four engines is selected. The engines selected for each combination will be specified by the Administrator as to fuel system.

(3) The Administrator may select a maximum of two additional engines within each engine family based upon features indicating that they may have the highest emission levels of the engines in that engine family. In selecting these engines, the Administrator will consider such features as the exhaust emission control system, induction system characteristics, ignition system characteristics, fuel system, rated horsepower, rated torque, and compression ratio.

(4) If the engines selected in accordance with subparagraphs (2) and (3) of this paragraph do not represent each engine-system combination, then one engine of each engine-system combination not represented shall be selected by the Administrator. The engine selected shall be of the displacement with the largest projected sales volume of engines with the exhaust emission control system in the family and will be designated by the Administrator as to fuel system.

(c) Durability data engines:

(1) A durability data engine will be selected by the Administrator to represent each engine-system combination. The engine selected shall be of the displacement with the largest projected sales volume of engines with that exhaust emission control system in that engine family and will be designated by the Administrator as to fuel system.

(2) If an exhaust emission control system is used in only one engine family, an additional engine using that control system in that family will be selected so that the durability data fleet shall contain at least two engines with each control system. The additional engine will be selected in the same manner as engines selected under subparagraph (1) of this paragraph.

(3) A manufacturer may elect to operate and test additional engines to represent any engine-system combination. The additional engines must be of the same engine displacement and fuel system as the engine selected for that combination in accordance with the provisions of subparagraph (1) of this paragraph. Notice of an intent to run additional engines shall be given to the Administrator not later than 30 days following notification of the test fleet selection.

(d) Any manufacturer whose projected sales of new motor vehicle engines subject to this subpart for the model year

for which certification is sought is less than 700 engines may request a reduction in the number of test engines determined in accordance with the foregoing provisions of this section. The Administrator may agree to such lesser number as he determines will meet the objectives of this procedure.

(e) In lieu of testing an emission data or durability data engine selected under paragraph (b) or (c) of this section and submitting data therefor, a manufacturer may, with the prior written approval of the Administrator, submit data on a similar engine for which certification has previously been obtained.

§ 85.111 Maintenance.

(a) (1) Maintenance on the engines and fuel systems of durability engines may be performed only under the following provisions:

(i) Two major engine tuneups to manufacturer's specifications may be performed at 500 and 1,000 hours (± 8 hours) of scheduled dynamometer operation with the following exception: On engines with a displacement of 200 cubic inches or less, a major engine tuneup may be performed at 375, 750, and 1,125 hours (± 8 hours) of scheduled dynamometer operation. A major engine tuneup shall be restricted to the following:

- (a) Replace spark plugs.
- (b) Inspect ignition wiring and replace as required.
- (c) Replace distributor breaker points and condenser as required.
- (d) Lubricate distributor cam.
- (e) Check distributor advance and breaker point dwell angle and adjust as required.
- (f) Check automatic choke for free operation and correct as required.
- (g) Adjust carburetor idle speed and mixture.
- (h) Adjust drive belt tension on engine accessories.
- (i) Adjust valve lash if required.
- (j) Check exhaust heat control valve for free operation.
- (k) Check engine bolt torque and tighten as required.

(ii) Spark plugs may be changed if a persistent misfire is detected.

(iii) Normal services (engine oil change, and oil filter, fuel filter and air filter servicing) will be allowed at manufacturer's recommended intervals.

(iv) The crankcase emission control system may be serviced at 375-hour intervals (± 8 hours) of dynamometer operation.

(v) Readjustment of the engine choke mechanism or idle settings may be performed only if there is a problem of stalling at idle.

(vi) Leaks in the fuel system, engine lubrication system and cooling system may be repaired.

(vii) Engine idle speed may be adjusted at the 125-hour test point.

(viii) Any other engine or fuel system maintenance or repairs will be allowed only with the advance approval of the Administrator.

(2) Allowable maintenance on emission data engines shall be limited to the adjustment of engine idle speed at the 125-hour test point.

(b) Complete emission tests (see §§ 85.101-85.109) shall be run before and after any engine maintenance which may reasonably be expected to affect emissions. These test data shall be supplied to the Administrator immediately after the tests, along with a complete record of all pertinent maintenance, including an engineering report of any malfunction diagnosis and the corrective action taken. In addition, all test data and maintenance reports shall be compiled and provided to the Administrator in accordance with § 85.53.

(c) If the Administrator determines that maintenance or repairs have resulted in a substantial change to the engine-system combination, the engine shall not be used as a durability data engine.

§ 85.112 Service accumulation and emission measurements.

The engine dynamometer service accumulation schedule will consist of several operating conditions which give the same percentage of time at various manifold vacuums and the modes as specified in the emission test cycle. The average speed shall be between 1,650 and 1,700 r.p.m. with some operation at 3,200 r.p.m. or governed speed, whichever is lower. Maximum cycle time shall be 15 minutes. A cycle approved in advance by the Administrator shall be used.

(a) Emission data engines: Each emission data engine shall be operated for 125 hours with all emission control systems installed and operating. Emission tests shall be conducted at zero and 125 hours.

(b) Durability data engines: Each durability data engine shall be operated, with all emission control systems installed and operating, for 1,500 hours. Emission measurements, as prescribed, shall be made at zero hours and at each 125-hour interval.

(c) All tests required by this subpart to be conducted after 125 hours of operation or at any multiple of 125 hours may be conducted at any accumulated number of hours within 8 hours of 125 hours or the appropriate multiple of 125 hours, respectively.

(d) The results of each emission test shall be supplied to the Administrator immediately after the test. In addition, all test data shall be compiled and provided to the Administrator in accordance with § 85.53.

(e) Whenever the manufacturer proposes to operate and test an engine which may be used for emission or durability data, he shall provide the zero-hour test data to the Administrator and make the engine available for such testing under § 35.54 as the Administrator may require, before beginning to accumulate hours on the engine. Failure to comply with this requirement will invalidate all test data later submitted for this engine.

(f) Once a manufacturer begins to operate an emission data or durability data engine, as indicated by compliance with paragraph (e) of this section, he shall continue to run the engine to 125 hours or 1,500 hours, respectively, and the data from the engine will be used in the calculations under § 85.113. Discontinuation of an engine shall be allowed only with the prior written consent of the Administrator.

§ 85.113 Compliance with emission standards.

(a) The exhaust emission standards in § 85.31 apply to the emissions of engines for their useful life.

(b) Since emission control efficiency decreases with the accumulation of hours on the engine, the emission level of an engine which has accumulated 1,500 hours of dynamometer operation will be used as the basis for determining compliance with the standards.

$$\text{factor} = \frac{\text{exhaust emissions interpolated to 1,500 hours}}{\text{exhaust emissions interpolated to 125 hours}}$$

the best fit straight lines, fitted by the method of least squares, shall be drawn through these data points. The interpolated 125- and 1,500-hour points on this line must be within the standard provided in § 85.31 or the data shall not be used in calculation of a deterioration factor.

(iii) An exhaust emission deterioration factor shall be calculated for each combination as follows:

(2) The exhaust emission test results for each emission data engine shall be multiplied by the appropriate deterioration factor: *Provided*, That if a deterioration factor as computed in subparagraph (1) of this paragraph is less than one, that deterioration factor shall be one for the purposes of this subparagraph.

(3) The emissions to compare with the standard shall be the adjusted emissions of subparagraph (2) of this paragraph for each emission data engine.

(4) Every test engine of an engine family must comply with all applicable standards, as determined in subparagraph (3) of this paragraph, before any engine in that family will be certified.

Subpart J—Test Procedures for Engine Exhaust Emissions (Heavy Duty Diesel Engines)

§ 85.120 Introduction.

(a) The procedures described in this subpart will be the test program to determine the conformity of heavy duty diesel engines with the applicable standards set forth in this part:

(b) The test consists of a prescribed sequence of engine operating conditions on an engine dynamometer with con-

(c) The procedure for determining compliance of a new engine with exhaust emission standards is as follows:

(1) Separate emission deterioration factors shall be determined from the emission results of the durability data engines for each engine-system combination. Separate factors shall be established for HC and CO for each combination.

(i) The applicable results to be used in determining the deterioration factors for each combination shall be:

(a) All emission data from the tests required under § 85.112(b), except the zero-hour tests. This shall include the official test results, as determined in § 85.54, for all tests conducted on all durability engines of the combination selected under § 85.110(c) (including all engines elected to be operated by the manufacturer under § 85.110(c)(3)).

(b) All emission data from the tests conducted before and after the maintenance provided in § 85.111(a)(1)(i).

(ii) All applicable results shall be plotted as a function of the hours on the system, rounded to the nearest hour, and

tinuous examination of the exhaust gases. The test is applicable equally to controlled engines equipped with means for preventing, controlling, or eliminating smoke emissions and to uncontrolled engines.

(c) The test is designed to determine the opacity of smoke in exhaust emissions during those engine operating conditions which tend to promote smoke from diesel-powered vehicles.

(d) The test procedure begins with a warm engine which is then run through preloading and preconditioning operations. After an idling period, the engine is operated through acceleration and lugging modes during which smoke emission measurements are made to compare with the standards. The engine is then returned to the idle condition and the acceleration and lugging modes are repeated. Three sequences of acceleration and lugging constitute the full set of operating conditions for smoke emission measurement.

§ 85.121 Diesel fuel specifications.

(a) The diesel fuels employed shall be clean and bright, with pour and cloud points adequate for operability. The fuels may contain nonmetallic additives as follows: cetane improver, metal deactivator, antioxidant, dehazer, antitrust, pour depressant, dye, and dispersant.

(b) Fuel meeting the following specifications, or substantially equivalent specifications approved by the Administrator, shall be used in exhaust emission testing. The grade of fuel recommended by the engine manufacturer, commercially designated as "Type 1-D" or "Type 2-D", shall be used.

during conduct of the prescribed engine tests.

(c) A noninsulated exhaust system extending 12±2 feet from the exhaust manifold of the engine and presenting an exhaust back pressure within ±0.2 inches Hg of the upper limit at maximum rated horsepower, as established by the engine manufacturer in his sales and service literature for vehicle application. A conventional automotive number of a size and type commonly used with the engine being tested shall be employed in the exhaust system during smoke emission testing. The terminal 2 feet of the exhaust pipe shall be of circular cross section and be free of elbows and bends. The end of the pipe shall be cut off squarely. The terminal 2 feet of the exhaust pipe shall have a diameter in accordance with the engine being tested, as specified below:

Maximum rated horsepower	Exhaust pipe size
Less than 101	2"
101-200	3"
201-300	4"
301 or more	5"

(d) An engine air inlet system presenting an air inlet restriction within ±1-inch of water of the upper limit for the engine operating condition which results in maximum air flow, as established by the engine manufacturer in his sales and service literature, for the engine being tested.

§ 85.124 Smoke measurement system.
(a) Schematic drawing. The following figure (fig. 7) is a schematic drawing of the optical system of the light extinction meter.

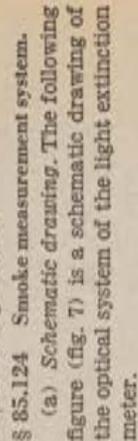


Figure 7. EPA smokemeter optical system (schematic).

engine speed reaches 95 to 100 percent of rated speed in 10±2 seconds.

(3) Lugging mode. (1) Proceeding from the acceleration mode, the dynamometer controls shall be adjusted to permit the engine to develop maximum horsepower at rated speed. Smoke emissions during this transitional mode are not used in determining smoke emissions to compare with the standard.

(H) Without changing the throttle position, the dynamometer controls shall be adjusted gradually to slow the engine to the speed of maximum torque or to 60 percent of rated speed, whichever is higher. This engine lugging operation shall be performed smoothly over a period of 35±5 seconds. The rate of slowing of the engine shall be linear, within ±100 r.p.m.

(4) Engine unloading. After completion of the lugging mode in subparagraph (3) (ii) of this paragraph, the dynamometer and engine shall be returned to the idle condition described in subparagraph (1) of this paragraph.

(b) The procedures described in paragraph (a) (1) through (4) of this section shall be repeated until the entire cycle has been run three times.

§ 85.123 Dynamometer and engine equipment.
The following equipment shall be used for smoke emission testing of engines on engine dynamometers.

(a) An engine dynamometer with adequate characteristics to perform the test cycle described in § 85.122.

(b) An engine cooling system having sufficient capacity to maintain the engine at normal operating temperatures

ASTM test method No.

Item	Type 1-D	Type 2-D
Cetane	D 613	45-50
Distribution range	D 86	
IBP, °F	330-360	340-400
10 percent point, °F	370-430	400-460
50 percent point, °F	410-480	470-540
90 percent point, °F	460-520	530-610
EP, °F	500-560	580-660
Gravity, ° API	40-44	35-37
Total sulfur, percent	0.05-0.20	0.2-0.5
Hydrocarbon composition	D 129 or D 3622	
Aromatics, percent	8-15	27 (Min.)
Paraffins, Naphthenes, Olefins	Remainder	Remainder
Flash point, °F (Min.)	D 93	130
Viscosity, centistokes	D 445	1.6-2.0
		2.0-3.2

(c) Fuel meeting the following specifications, or substantially equivalent specifications approved by the Administrator, shall be used in service accumulation. The grade of fuel recommended by the engine manufacturer, commercially designated as "Type 1-D" or "Type 2-D", shall be used.

ASTM test method No.

Item	Type 1-D	Type 2-D
Cetane	45-55	45-55
Distribution range	D 613	
IBP, °F	D 86	
10 percent point, °F	330-360	340-410
50 percent point, °F	370-430	400-470
90 percent point, °F	410-480	470-540
EP, °F	460-520	530-610
Gravity, ° API	40-44	35-40
Total sulfur, percent	0.05-0.20	0.2-0.5
Flash point, °F (Min.)	D 129 or D 3622	130
Viscosity, centistokes	D 445	1.6-2.0
		2.0-3.2

(d) The type fuel, including additive and other specifications, used under paragraphs (b) and (c) of this section shall be reported in accordance with § 85.51(b) (3).

§ 85.122 Dynamometer operation cycle for smoke emission tests.

(a) The following sequence of operations shall be performed during engine dynamometer testing of smoke emissions, starting with the dynamometer preloading determined and the engine preconditioned (§ 85.127(c)).

(1) Idle mode. The engine is caused to idle for 5 to 5.5 minutes at the manufacturer's recommended low idle speed. The dynamometer controls shall be set to provide minimum load by turning the load switch to the "off" position or by adjusting the controls to the minimum load position.

(2) Acceleration mode. (i) The engine speed shall be increased to 200±50 r.p.m. above the manufacturer's recommended low idle speed within 3 seconds.

(ii) When the engine reaches the speed required in subdivision (i) of this subparagraph, the throttle shall be moved rapidly to the closed position and the preselected load required to perform the acceleration in subdivision (iv) of this subparagraph shall be applied. The engine speed shall be reduced to the speed of maximum rated torque or 60 percent of rated speed (whichever is higher), within ±50 r.p.m. Smoke emissions during this transitional mode are not used in determining smoke emissions to compare with the standard.

(iv) The throttle shall be moved rapidly to the full-throttle position and the engine accelerated against the preselected dynamometer load such that the

(b) *Equipment.* The following equipment shall be used in the system:

(1) *Adapter*—the smokemeter optical unit may be mounted on a fixed or movable frame. The normal unrestricted shape of the exhaust plume shall not be modified by the adapter, the meter, or any ventilation system used to remove the exhaust from the test site.

(2) *Smokemeter (light extinction meter)*—continuous recording, full-flow light obscuration meter. It shall be positioned near the end of the exhaust pipe so that a built-in light beam traverses the exhaust smoke plume which issues from the pipe at right angles to the axis of the plume. The light source is an incandescent lamp operated at a constant voltage of not less than 15 percent of the manufacturer's specified voltage. The lamp output is collimated to a beam with a nominal diameter of 1.125 inches. The angle of divergence of the collimated beam shall be within 4° included angle. A light detector, directly opposed to the light source, measures the amount of light blocked by the smoke in the exhaust. The detector sensitivity is restricted to the visual range and comparable to that of the human eye. A collimating tube with apertures equal to the beam diameter is attached to the detector. It restricts the viewing angle of the detector to within 16° included angle. An amplified signal corresponding to the amount of light blocked is recorded continuously on a remote recorder. An air curtain across the light source and detector window assemblies may be used to minimize deposition of smoke particles on those surfaces provided that it does not measurably affect the opacity of the plume. The meter consists of two units, an optical unit and a remote control unit. Light extinction meters employing substantially identical measurement principles and producing substantially equivalent results but which employ other electronic and optical techniques may be used only after having been approved in advance by the Administrator.

(3) *Recorder*—a continuous recorder, with variable chart speed over a minimal range of 0.5 to 8.0 inches per minute (or equivalent) and an automatic marker indicating 1-second intervals shall be used for continuously recording the transient conditions of exhaust gas opacity, engine r.p.m. and torque. The recorder scale for opacity shall be linear and calibrated to read from 0 to 100 percent opacity full scale. The opacity trace shall have a resolution within 1 percent opacity. The recorder scale for engine r.p.m. and the recorder scale for observed engine torque shall be linear and shall have full scale calibration such as to facilitate chart reading. The r.p.m. trace shall have a resolution within 30 r.p.m. The torque trace shall have a resolution within 10 lb.-ft. Any means other than strip chart recorder may be used provided it produces a permanent visual data record of quality equal to or better than that described above.

(4) The recorder used with the smokemeter shall be capable of full-scale deflection in 0.5 second or less. The smoke-

meter-recorder combination may be damped so that signals with a frequency higher than 10 cycles per second are attenuated. A separate low-pass electronic filter with the following performance characteristics may be installed between the smokemeter and the recorder to achieve the high-frequency attenuation.

(i) 3 decibel point—10 cycles per second.

(ii) Insertion loss—zero ± 0.5 decibels.

(iii) Selectivity—12 decibels per octave above 10 cycles per second.

(iv) Attenuation—27 decibels down at 40 cycles per second minimum.

(c) *Assembling equipment.* (1) The optical unit of the smokemeter shall be mounted radially to the exhaust pipe so that the measurement will be made at right angles to the axis of the exhaust plume. The distance from the optical centerline to the exhaust pipe outlet shall be 1.0 to 1.5 pipe diameters but never less than 4 inches. The full flow of the exhaust stream shall be centered between the source and detector apertures (or windows and lenses) and on the axis of the light beam.

(2) Power shall be supplied to the control unit of the smokemeter in time (at least 15 minutes prior to testing) to allow for stabilization.

§ 85.125 Information to be recorded.

The following information shall be recorded with respect to each test:

(a) Test number.

(b) Date and time of day.

(c) Instrument operator.

(d) Engine operator.

(e) *Engine Identification numbers*—Date of manufacture—Number of hours of operation accumulated on engine—Engine Family—Exhaust pipe diameter—Fuel injector type—Maximum measured fuel rate at maximum measured torque and horsepower—Air aspiration system—Low idle r.p.m.—Maximum governed r.p.m.—Maximum measured horsepower at r.p.m.—Maximum measured torque at r.p.m.—Exhaust system back pressure—Air inlet restriction.

(f) *Smokemeter.* Number—Zero control setting—Calibration control setting—Gain.

(g) *Recorder chart.* Identify zero traces—Calibration traces—Idle traces—Acceleration and lug-down test traces—Start and finish of each test.

(h) *Ambient temperature in dynamometer testing room.*

(i) *Engine intake air temperature and humidity.*

(j) *Barometric pressure.*

(k) *Observed engine torque.*

§ 85.126 Instrument checks.

(a) The smokemeter shall be checked according to the following procedure prior to each test:

(1) The optical surfaces of the optical section shall be checked to verify that they are clean and free of foreign material and fingerprints.

(2) The zero control shall be adjusted under conditions of "no smoke" to give a recorder trace of zero.

(3) Calibrated neutral density filters having approximately 20 percent and 40 percent opacity shall be employed to check the linearity of the instrument. The filter(s) shall be inserted in the light path perpendicular to the axis of the beam and adjacent to the opening from which the beam of light from the light source emanates, and the recorder response shall be noted. The nominal opacity value of the filter will be confirmed by the Administrator. Deviations in excess of 1 percent of the nominal opacity shall be corrected.

(b) The instruments for measuring and recording engine r.p.m., engine torque, air inlet restrictions, exhaust system back pressure, etc., which are used in the tests prescribed herein shall be calibrated from time to time in accordance with good technical practice.

§ 85.127 Test run.

(a) The temperature of the air supplied to the engine shall be between 68° F. and 86° F. The observed barometric pressure shall be between 28.5 inches and 31 inches Hg. Higher air temperature or lower barometric pressure may be used, if desired, but no allowance will be made for possible increased smoke emissions because of such conditions.

(b) The governor and fuel system shall have been adjusted to provide engine performance at the levels specified by the engine manufacturer for maximum rated horsepower and maximum rated torque. These specifications shall be reported in accordance with § 85.51 (b) (3).

(c) The following steps shall be taken for each test:

(1) Start cooling system.

(2) Starting with a warmed engine, determine by experimentation the dynamometer inertia and dynamometer load required to perform the acceleration in the dynamometer cycle for smoke emission tests (§ 85.122(a)(2)). In a manner appropriate for the dynamometer and controls being used, arrange to conduct the acceleration mode.

(3) Install smokemeter optical unit and connect it to the recorder. Connect the engine r.p.m. and torque sensing devices to the recorder.

(4) Turn on purge air to the optical unit of the smokemeter, if purge air is used.

(5) Check and record zero and span settings of the smokemeter recorder at a chart speed of approximately 1 inch per minute. (The optical unit shall be retracted from its position about the exhaust stream if the engine is left running.)

(6) Precondition the engine by operating it for 10 minutes at maximum rated horsepower.

(7) Proceed with the sequence of smoke emission measurements on the engine dynamometer as prescribed in § 85.122.

(8) During the test sequence of § 85.122, continuously record smoke measurements, engine r.p.m. and torque at a

chart speed of approximately 1 inch per minute minimum during the idle mode and transitional modes and 8 inches per minute minimum during the acceleration and lugging modes.

(9) Turn off engine.

(10) Check zero and reset if necessary and check span of the smokemeter recorder by inserting neutral density filters. If either zero or span drift is in excess of 2 percent opacity, the test results shall be invalidated.

§ 85.128 Chart reading.

(a) The following procedure shall be employed in reading the smokemeter recorder chart.

(1) Locate the acceleration mode (§ 85.122(a)(2)) and the lugging mode (§ 85.122(a)(3)) on the Chart. Divide each mode into ½-second intervals beginning at the start of each mode. Determine the average smoke reading during each ½-second interval except those recorded during the transitional portions of the acceleration mode (§ 85.122(a)(2)(iii)) and the lugging mode (§ 85.122(a)(3)(i)).

(2) Locate and record the 15 highest ½-second readings during the acceleration mode of each dynamometer cycle.

(3) Locate and record the five highest ½-second readings during the lugging mode of each dynamometer cycle.

§ 85.129 Calculations.

(a) Average the 45 readings in § 85.128(a)(2) and designate the value as "a".

(b) Average the 15 readings in § 85.128(a)(3) and designate the value as "b".

§ 85.130 Test engines.

(a) The engines covered by the application for certification will be divided into engine families based upon the criteria outlined in § 85.89(a).

(b) Emission data engines:

(i) Engines will be chosen to be run for emission data based upon engine family groupings. Within each engine family, the requirements of this paragraph must be met.

(ii) Engines of each engine family will be divided into groups based upon exhaust emission control system. Two engines of each engine-system combination shall be run for smoke emission data as prescribed in § 85.132(b). Within each combination, the engines that feature the highest fuel feed per stroke, primarily at the speed of maximum rated torque and secondarily at rated speed, will be selected. In the case where more than one engine in an engine-system combination have the highest fuel feed per stroke, the engine with the highest maximum rated torque will be selected.

(c) Durability data engines:

(i) One engine from each engine-system combination shall be tested for lifetime smoke emission data as prescribed in § 85.132(c). Within each combination, the engine which features the highest fuel feed per stroke, primarily at rated speed and secondarily at the speed of maximum rated torque, will be selected for durability testing. In the case where more than one engine in an

engine-system combination has the highest fuel feed per stroke, the engine with the highest maximum rated horsepower will be selected for durability testing.

(ii) A manufacturer may elect to operate and test additional engines to represent any engine-system combination. The additional engines must be of the same model and fuel system as the engine selected in accordance with the provisions of subparagraph (i) of this paragraph. Notice of an intent to test additional engines shall be given to the Administration not later than 30 days following notification of the test fleet selection.

(iii) Any manufacturer whose projected sales of new motor vehicle engines subject to this subpart for the model year for which certification is sought is less than 200 engines may request a reduction in the number of test engines determined in accordance with the foregoing provisions of this section. The Administrator may agree to such lesser number as he determines would meet the objectives of this procedure.

(iv) In lieu of testing an emission data or durability data engine selected under paragraph (b) or (c) of this section and submitting data therefor, a manufacturer may, with the prior written approval of the Administrator, submit data on a similar engine for which certification has previously been obtained.

§ 85.131 Maintenance.

(a) (1) Maintenance on the engines and fuel systems of durability engines may be performed only under the following provisions:

(i) One major engine servicing to manufacturer's specifications may be performed at 500 hours (± 8 hours) of dynamometer operation. A major engine servicing shall be restricted to the following:

(a) Adjust low idle speed.

(b) Adjust valve lash if required.

(c) Adjust injector timing.

(d) Adjust governor.

(e) Clean and service injector tips.

(ii) Injectors may be changed if a persistent misfire is detected.

(iii) Normal engine lubrication services (engine oil change and oil filter, fuel filter, and air filter servicing and adjustment of drive belt tension and engine bolt torque, as required) will be allowed at manufacturer's recommended intervals.

(iv) Readjustment of the engine fuel rates may be performed only if there is a problem of dropping below 95 percent of maximum rated horsepower at 95-100 percent rated speed.

(v) Leaks in the fuel system, engine lubrication system and cooling system may be repaired.

(vi) Engine low-idle speed may be adjusted at the 125-hour test point.

(vii) Any other engine or fuel system maintenance or repair will be allowed only with the advance approval of the Administrator.

(2) Allowable maintenance on emission data engines shall be limited to the

adjustment of engine low idle speed at the 125-hour test point.

(b) Complete emission tests (see §§ 85.121-85.129) shall be run before and after any engine maintenance which may reasonably be expected to affect emissions. These test data shall be supplied to the Administrator immediately after the tests, along with a complete record of all pertinent maintenance, including an engineering report of any malfunction diagnosis and the corrective action taken. In addition, all test data and maintenance reports shall be compiled and provided to the Administrator in accordance with § 85.53.

(c) If the Administrator determines that maintenance or repairs performed have resulted in a substantial change to the engine-system combination, the engine shall not be used as a durability data engine.

§ 85.132 Service accumulation and emission measurements.

Service accumulation shall be accomplished by operation of an engine on a dynamometer.

(a) Emission data engines: Each engine shall be operated on a dynamometer for 125 hours with the dynamometer and engine adjusted so that the engine is operating at 95-100 percent of rated speed and at least 95 percent of maximum rated horsepower. During such operation, the engine shall be run at the exhaust back pressure specified in § 85.123(c) and the air inlet restriction specified in § 85.123(d) except that the tolerances shall be ± 0.5 inches of Hg. and ± 3 inches of water respectively. Exhaust smoke tests shall be conducted at zero and 125 hours of operation.

(b) Durability data engines: Each engine shall be operated on a dynamometer for 1,000 hours with the dynamometer and engine adjusted so that the engine is operating at 95-100 percent of rated speed and at least 95 percent of maximum rated horsepower. During such operation, the engine shall be run at the exhaust back pressure specified in § 85.123(c) and the air inlet restriction specified in § 85.123(d) except that the tolerances shall be ± 0.5 inches of Hg. and ± 3 inches of water respectively. Exhaust smoke measurements shall be made at zero hours and at each 125 hours of operation. All results except the zero hour results shall be used to establish the deterioration factors (see § 85.133).

(c) All tests required by this subpart to be conducted after 125 hours of dynamometer operation or at any multiple of 125 hours may be conducted at any accumulated hours within 8 hours of 125 hours or the appropriate multiple of 125 hours, respectively.

(d) The results of each emission test shall be supplied to the Administrator immediately after the test. In addition, all test data shall be compiled and provided to the Administrator in accordance with § 85.53.

(e) Whenever the manufacturer proposes to operate and test an engine which may be used for emission or durability data, he shall provide the zero hour test

data to the Administrator and make the engine available for such testing under § 85.54 as the Administrator may require before beginning to accumulate hours on the engine. Failure to comply with this requirement shall invalidate all test data submitted for this engine.

(f) Once a manufacturer begins to operate an emission data or durability data engine, as indicated by compliance with paragraph (e) of this section, he shall continue to run the engine to 125 hours or 1,000 hours, respectively, and the data from the engine shall be used in the calculations under § 85.133. Discontinuation of an engine shall be allowed only with the prior written consent of the Administrator.

§ 85.133 Compliance with emission standards.

(a) The emission standards in § 85.41 apply to the emissions of engines for their useful life.

(b) Since emission control efficiency decreases with the accumulation of hours on the engine, the emission level of an engine which has accumulated 1,000 hours of dynamometer operation will be used as the basis for determining compliance with the standards.

(c) The procedure for determining compliance with exhaust smoke emission standards in heavy duty diesel engines is as follows:

(1) Emission deterioration factors for the acceleration mode (designated as "A") and the lugging mode (designated as "B") shall be established separately for each engine-system combination.

(i) The applicable results to be used in determining the deterioration factors for each combination shall be:

(a) All emission data from the tests required under § 85.132(b), except the zero hour tests. This shall include the official test results, as determined in § 85.54, for all tests conducted on all durability engines of the combination selected under § 85.130(c) (including all engines elected to be operated by the manufacturer under § 85.130(c)(2)).

(b) All emission data from the tests conducted before and after the maintenance provided in § 85.131(a)(1)(i).

(ii) All applicable results shall be plotted as a function of the hours on the system, rounded to the nearest hour, and the best fit straight lines, fitted by the method of least squares, shall be drawn through these data points. The interpolated 125 and 1,000 hour points on this line must be within the standard provided in § 85.41 or the data shall not be used in calculation of a deterioration factor.

(iii) The deterioration factors will be calculated as follows:

A-percent opacity "a", interpolated to 1,000 hours, minus percent opacity "a", interpolated to 125 hours.

B-percent opacity "b", interpolated to 1,000 hours, minus percent opacity "b", interpolated to 125 hours.

(2) The "percent opacity" values to compare with the standards shall be the opacity values "a" and "b" for each emis-

sion data engine within an engine-system combination to which are added the respective factors "A" and "B" of subparagraph (1) of this paragraph for that engine-system combination: *Provided*, That if a deterioration factor as computed in subparagraph (1) of this paragraph is less than zero, that deterioration factor shall be zero for the purposes of this subparagraph.

(3) Every test engine of an engine family must comply with all applicable standards, as determined in subparagraph (2) of this paragraph, before any engine in that family will be certified.

Subparts K-L—[Reserved]

Subpart M—Performance of Motor Vehicles and Motor Vehicle Engines During Their Useful Life

§ 85.160 Maintenance instructions.

(a) The manufacturer shall furnish or cause to be furnished to the ultimate purchaser of each new motor vehicle or engine subject to any of the standards prescribed in this part, written instructions for the maintenance and use of the vehicle or engine by the ultimate purchaser as may be reasonable and necessary to assure the proper functioning of emission control systems.

(1) Such instructions shall be provided for those vehicle and engine components listed in Appendix F to this part (and for any other components) to the extent that maintenance of these components is necessary to assure the proper functioning of emission control systems.

(2) Such instructions shall be in clear, and to the extent practicable, nontechnical language.

(b) The maintenance instructions required by this section shall contain a general description of the documentation which the manufacturer will require from the ultimate purchaser or any subsequent purchaser as evidence of compliance with the instructions.

§ 85.161 Submission of maintenance instructions.

(a) The manufacturer shall provide to the Administrator, no later than the time of the submission required by § 85.53, a copy of the maintenance instructions which the manufacturer proposes to supply to the ultimate purchaser in accordance with § 85.160(a). The Administrator will review such instructions to determine whether they are reasonable and necessary to assure the proper functioning of the vehicle's or engine's emission control systems. The Administrator will notify the manufacturer of his determination whether such instructions are reasonable and necessary to assure the proper functioning of the emission control systems.

(b) Any revision to the maintenance instructions which will affect emissions shall be supplied to the Administrator at least 30 days before being supplied to the ultimate purchaser unless the Administrator consents to a lesser period of time.

Subparts N-R—[Reserved]

Subpart S—Low-Emission Vehicles

AUTHORITY: The provisions of this Subpart S issued under sec. 212, 84 Stat. 1676, Public Law 91-604.

§ 85.320 Definitions.

(a) As used in this subpart, all terms not defined herein shall have the meaning given them in the Clean Air Act (42 U.S.C. 1857 f-1 et seq.) and in § 85.1:

(1) "Motor vehicle" means any self-propelled vehicle designed for use in the United States on the highways, other than a vehicle designed or used for military field training, combat, or tactical purposes.

(2) "Inherently low-polluting vehicle" means any low-emission vehicle which is powered by a propulsion system which does not require control devices, for exhaust emissions, external to the engine.

(3) "Anticipated certification period" means the 1-year period which begins 270 days after submission of a completed certification application to the Administrator.

(4) "Model year" as used in this subpart shall have the same meaning as that term has under section 202(b)(3)(A)(i) of the Clean Air Act.

(5) "Light-duty motor vehicle" as used in this subpart means a motor vehicle which may be a suitable substitute for a class or model of light-duty motor vehicles as defined at § 85.1(a)(5).

§ 85.321 Low-emission vehicle.

(a) A "low-emission vehicle" for the purpose of being certified as a suitable substitute for any class or model of light-duty motor vehicles means any motor vehicle for which a completed certification application has been filed in accordance with § 85.322 and which—

(1) Meets the most stringent crankcase emission and fuel evaporative standards which will apply under section 202 of the Clean Air Act during any part of the anticipated certification period to motor vehicles of that type; and

(2) Produces exhaust emissions of (i) hydrocarbons or carbon monoxide which meet the emission standards applicable under section 202 of the Act to model year 1975 gasoline-fueled light-duty vehicles, or (ii) oxides of nitrogen which meet the emission standard applicable under section 202 to model year 1976 gasoline-fueled light-duty vehicles; and

(3) Does not exceed the following exhaust emission standards:

(i) Hydrocarbons—3 grams per vehicle mile;

(ii) Carbon monoxide—28 grams per vehicle mile; and

(iii) Oxides of nitrogen—3.1 grams per vehicle mile; and

(4) Emits no air pollutant other than those pollutants which are emitted by any class or model of motor vehicles for which the applicant vehicle may be a suitable substitute, unless the Administrator determines that such other emissions will not contribute significantly to air pollution which causes or contributes

to the endangerment of public health or welfare; and

(5) Does not significantly increase the emissions of any air pollutant not subject to an emission standard under section 202 of the Act by comparison to the emissions of such pollutant by any class or model of motor vehicles for which the applicant vehicle may be a suitable substitute.

(b) The applicable test procedures for determining compliance with the standards established by paragraph (a) of this section shall be those in effect under section 202 of the Act for 1975 model year gasoline-fueled light-duty motor vehicles, except as provided in § 85.322(b).

§ 85.322 Application for certification.

(a) Any person desiring certification of a test vehicle under section 212 of the Clean Air Act shall submit to the Administrator a notice of intent to submit a certification application with respect to such vehicle. The notice of intent shall contain a description of the vehicle, including the propulsion system and the fuel used by it; and such other information as the Administrator may request. The Administrator will transmit a copy of the notice of intent to the Low-Emission Vehicle Certification Board.

(b) As soon as practicable after receipt of a notice of intent to submit a certification application for a vehicle, the Administrator shall determine whether the test procedures required under § 85.321(b) are applicable to that vehicle. If he determines they are inapplicable, he shall, as soon as practicable thereafter, prescribe test procedures for determining whether such vehicle is a low-emission vehicle, and, if necessary, he shall establish emission standards equivalent to those in effect under paragraph (a) of § 85.321. He shall also select test vehicles in accordance with § 85.322.

(c) After completion of testing of all test vehicles in accordance with applicable test procedures and with § 85.323, the person desiring certification shall submit to the Administrator a written application signed by an authorized representative of the applicant. The application shall contain all emission data from the tests of the emission and durability data test vehicles and all data required by the Board under § 400.4 of this title, relative to the following vehicle characteristics:

- (1) Safety;
- (2) Performance characteristics;
- (3) Reliability potential;
- (4) Serviceability;
- (5) Fuel availability;
- (6) Noise level; and
- (7) Maintenance costs.

(d) Any certification application must be filed prior to July 8, 1972, in order for that vehicle to be eligible for certification, except that the Administrator may, after consultation with the Board, accept an application filed no later than December 31, 1972, if he determines that it is likely that the Board will be able to make the determination required by

§ 400.6 of this title no later than April 2, 1973.

(e) In addition to the information required under this section, and under § 400.4 of this title, the Administrator may require the applicant to submit any other information which the Administrator deems necessary in determining whether the test vehicle is a low-emission vehicle. The application for certification may be considered incomplete, unless all information required by the Administrator and the Low-Emission Vehicle Certification Board has been submitted.

(f) The Administrator shall, immediately upon receipt of a completed application for certification under paragraph (c) of this section, publish in the FEDERAL REGISTER notice of receipt of the application, the name of the applicant, a brief description of the propulsion system and fuel used by the applicant vehicle, and information concerning the method by which the public may have access to data relating to the emission characteristics of the applicant vehicle.

§ 85.323 Test vehicle selection.

(a) The test vehicles covered by the application for certification shall be divided into engine families in accordance with § 85.89(a)(2) unless the Administrator approves an alternative procedure under § 85.322(b).

(b) Except as the Administrator may require pursuant to § 85.322(b), the applicant shall test or cause to be tested two durability data vehicles of each engine-system combination and four emission data vehicles of each engine family described in the notice of intent. The test vehicles shall be selected by the Administrator upon receipt of the notice of intent and after consultation with the Board to determine the models or classes of vehicles for which the test vehicle may be a suitable substitute.

§ 85.324 Data reporting.

(a) All data on emission data and durability data test vehicles shall be reported in accordance with §§ 85.53(a) and 85.81(d).

(b) For the purpose of this subpart § 85.91(e).

§ 85.325 Testing by the Administrator.

The Administrator may require that any one or more of the applicant's test vehicles be submitted to him, at such place or places and at such time or times as he may designate for the purpose of conducting emission tests.

§ 85.326 Administrator's determination.

(a) The Administrator shall, within 90 days after receipt of a completed application for certification, determine whether the applicant vehicle is a low-emission vehicle. Such determination shall be based upon an evaluation of the data provided to the Administrator in the application for certification, any supporting information the Administrator may obtain from the applicant, any relevant information obtained from the public, and the results of any testing the

Administrator may have conducted in accordance with § 85.325.

(b) The Administrator shall, immediately upon making the determination required in paragraph (a) of this section, publish in the FEDERAL REGISTER notice of such determination and the reasons therefor.

(c) The Administrator may make any recommendation which he deems appropriate concerning whether any applicant vehicle is an inherently low-polluting vehicle.

(d) If at any time after making an affirmative determination under paragraph (a) of this section but prior to certification by the Board, the Administrator obtains information which demonstrates that the applicant vehicle is not a low-emission vehicle, he may revoke such determination. The Administrator must immediately thereafter notify the Board and publish in the FEDERAL REGISTER notice of such revocation and the reasons therefor.

§ 85.327 Postcertification testing.

The Administrator shall at the request of the Board, test the emissions from certified low-emission vehicles purchased by the Federal Government. If these tests show that the emissions exceed the rates on which the Administrator based his determination under § 85.326, the Administrator shall notify the Board.

APPENDIX A

EPA URBAN DYNAMOMETER DRIVING SCHEDULE
(Speed versus Time Sequence)

Time (sec.)	Speed (m.p.h.)	Time (sec.)	Speed (m.p.h.)	Time (sec.)	Speed (m.p.h.)
0	0.0	43	16.0	86	29.8
1	0.0	44	17.1	87	30.1
2	0.0	45	19.1	88	30.4
3	0.0	46	21.1	89	30.7
4	0.0	47	22.7	90	30.7
5	0.0	48	22.9	91	30.5
6	0.0	49	22.7	92	30.4
7	0.0	50	22.6	93	30.3
8	0.0	51	21.3	94	30.4
9	0.0	52	19.0	95	30.8
10	0.0	53	17.1	96	30.4
11	0.0	54	15.8	97	29.9
12	0.0	55	15.8	98	29.5
13	0.0	56	17.7	99	29.9
14	0.0	57	19.8	100	30.3
15	0.0	58	21.6	101	30.7
16	0.0	59	23.2	102	30.9
17	0.0	60	24.2	103	31.0
18	0.0	61	24.6	104	30.9
19	0.0	62	24.9	105	30.4
20	0.0	63	25.0	106	29.8
21	3.0	64	24.6	107	29.9
22	5.9	65	24.5	108	30.2
23	8.6	66	24.7	109	30.7
24	11.5	67	24.8	110	31.2
25	14.3	68	24.7	111	31.8
26	16.9	69	24.6	112	32.2
27	17.3	70	24.6	113	32.4
28	18.1	71	25.1	114	32.2
29	20.7	72	25.6	115	31.7
30	21.7	73	25.7	116	28.6
31	22.4	74	25.4	117	25.3
32	22.5	75	24.9	118	22.0
33	22.1	76	25.0	119	18.7
34	21.5	77	25.4	120	15.4
35	20.9	78	26.0	121	12.1
36	20.4	79	26.0	122	8.8
37	19.8	80	25.7	123	5.5
38	17.0	81	26.1	124	2.2
39	14.9	82	26.7	125	0.0
40	14.9	83	27.5	126	0.0
41	15.2	84	28.6	127	0.0
42	15.5	85	29.3	128	0.0

APPENDIX A—Continued

Time (sec.)	Speed (m.p.h.)	Time (sec.)	Speed (m.p.h.)	Time (sec.)	Speed (m.p.h.)
129	0.0	197	37.3	265	52.1
130	0.0	198	39.3	266	52.4
131	0.0	199	40.5	267	52.0
132	0.0	200	42.1	268	51.9
133	0.0	201	43.5	269	51.7
134	0.0	202	45.1	270	51.5
135	0.0	203	46.0	271	51.6
136	0.0	204	46.8	272	51.8
137	0.0	205	47.5	273	52.1
138	0.0	206	47.5	274	52.5
139	0.0	207	47.3	275	53.0
140	0.0	208	47.2	276	53.5
141	0.0	209	47.0	277	54.0
142	0.0	210	47.0	278	54.9
143	0.0	211	47.0	279	55.4
144	0.0	212	47.0	280	55.6
145	0.0	213	47.0	281	56.0
146	0.0	214	47.2	282	56.0
147	0.0	215	47.4	283	55.8
148	0.0	216	47.9	284	55.2
149	0.0	217	48.5	285	54.5
150	0.0	218	49.1	286	53.6
151	0.0	219	49.5	287	52.5
152	0.0	220	50.0	288	51.5
153	0.0	221	50.6	289	51.5
154	0.0	222	51.0	290	51.5
155	0.0	223	51.5	291	51.1
156	0.0	224	52.2	292	50.1
157	0.0	225	53.2	293	50.0
158	0.0	226	54.1	294	50.1
159	0.0	227	54.6	295	50.0
160	0.0	228	54.9	296	49.6
161	0.0	229	55.0	297	49.5
162	0.0	230	54.9	298	49.5
163	0.0	231	54.6	299	49.5
164	3.3	232	54.6	300	49.1
165	6.8	233	54.8	301	48.8
166	9.9	234	55.1	302	48.1
167	13.2	235	55.5	303	47.2
168	16.5	236	55.7	304	46.1
169	19.8	237	56.1	305	45.0
170	22.2	238	56.3	306	43.8
171	24.3	239	56.6	307	42.6
172	25.8	240	56.7	308	41.5
173	28.4	241	56.7	309	40.3
174	25.7	242	56.5	310	38.5
175	25.1	243	56.5	311	37.0
176	24.7	244	56.5	312	35.2
177	25.0	245	56.5	313	33.8
178	25.2	246	56.5	314	32.5
179	25.4	247	56.5	315	31.5
180	25.8	248	56.4	316	30.6
181	27.2	249	56.1	317	30.5
182	26.5	250	55.8	318	30.0
183	24.0	251	55.1	319	29.0
184	22.7	252	54.6	320	27.5
185	19.4	253	54.2	321	24.8
186	17.7	254	54.0	322	21.5
187	17.2	255	53.7	323	20.1
188	18.1	256	53.6	324	19.1
189	18.6	257	53.9	325	18.5
190	20.0	258	54.0	326	17.0
191	22.2	259	54.1	327	15.5
192	24.5	260	54.1	328	12.5
193	27.3	261	53.8	329	10.8
194	30.5	262	53.4	330	8.0
195	33.5	263	53.0	331	4.7
196	36.2	264	52.6	332	1.4

APPENDIX A—Continued

Time (sec.)	Speed (m.p.h.)	Time (sec.)	Speed (m.p.h.)	Time (sec.)	Speed (m.p.h.)
333	0.0	401	0.0	469	35.7
334	0.0	402	0.0	470	36.0
335	0.0	403	2.6	471	36.0
336	0.0	404	5.9	472	35.6
337	0.0	405	9.2	473	35.5
338	0.0	406	12.5	474	35.4
339	0.0	407	15.8	475	35.2
340	0.0	408	19.1	476	35.2
341	0.0	409	22.4	477	35.2
342	0.0	410	25.0	478	35.2
343	0.0	411	25.6	479	35.2
344	0.0	412	27.5	480	35.2
345	0.0	413	29.0	481	35.0
346	0.0	414	30.0	482	35.1
347	1.0	415	30.1	483	35.2
348	4.3	416	30.0	484	35.5
349	7.6	417	29.7	485	35.2
350	10.9	418	29.3	486	35.0
351	14.2	419	28.8	487	35.0
352	17.3	420	28.0	488	35.0
353	20.0	421	25.0	489	34.8
354	22.5	422	21.7	490	34.6
355	23.7	423	18.4	491	34.5
356	25.2	424	15.1	492	33.5
357	26.6	425	11.8	493	32.0
358	28.1	426	8.5	494	30.1
359	30.0	427	5.2	495	28.0
360	30.8	428	1.9	496	25.5
361	31.6	429	0.0	497	22.5
362	32.1	430	0.0	498	19.8
363	32.8	431	0.0	499	16.5
364	33.8	432	0.0	500	13.2
365	34.5	433	0.0	501	10.3
366	34.6	434	0.0	502	7.2
367	34.9	435	0.0	503	4.0
368	34.8	436	0.0	504	1.0
369	34.5	437	0.0	505	0.0
370	34.7	438	0.0	506	0.0
371	35.5	439	0.0	507	0.0
372	36.0	440	0.0	508	0.0
373	36.0	441	0.0	509	0.0
374	36.0	442	0.0	510	0.0
375	36.0	443	0.0	511	1.2
376	36.0	444	0.0	512	3.5
377	36.0	445	0.0	513	5.5
378	36.1	446	0.0	514	6.5
379	36.4	447	0.0	515	8.5
380	36.5	448	3.3	516	9.6
381	36.4	449	6.6	517	10.5
382	36.0	450	9.9	518	11.9
383	35.1	451	13.2	519	14.0
384	34.1	452	16.5	520	16.0
385	33.5	453	19.8	521	17.7
386	31.4	454	23.1	522	19.0
387	29.0	455	26.4	523	20.1
388	25.7	456	27.8	524	21.0
389	23.0	457	29.1	525	22.0
390	20.3	458	31.5	526	23.0
391	17.5	459	33.0	527	23.8
392	14.5	460	33.6	528	24.5
393	12.0	461	34.8	529	24.9
394	8.7	462	35.1	530	25.0
395	5.4	463	35.6	531	25.0
396	2.1	464	36.1	532	25.0
397	0.0	465	36.0	533	25.0
398	0.0	466	36.1	534	25.0
399	0.0	467	36.2	535	25.0
400	0.0	468	36.0	536	25.6

APPENDIX A—Continued

Time (sec.)	Speed (m.p.h.)	Time (sec.)	Speed (m.p.h.)	Time (sec.)	Speed (m.p.h.)
537	25.8	605	22.5	673	16.4
538	26.0	606	22.7	674	14.5
539	25.6	607	23.7	675	11.8
540	25.2	608	25.1	676	8.7
541	25.0	609	26.0	677	5.8
542	25.0	610	26.5	678	3.5
543	25.0	611	27.0	679	2.0
544	24.4	612	26.1	680	0.0
545	23.1	613	22.8	681	0.0
546	19.8	614	19.5	682	0.0
547	16.5	615	16.2	683	0.0
548	13.2	616	12.9	684	0.0
549	9.9	617	9.6	685	0.0
550	6.6	618	6.3	686	0.0
551	3.3	619	3.0	687	0.0
552	0.0	620	0.0	688	0.0
553	0.0	621	0.0	689	0.0
554	0.0	622	0.0	690	0.0
555	0.0	623	0.0	691	0.0
556	0.0	624	0.0	692	0.0
557	0.0	625	0.0	693	0.0
558	0.0	626	0.0	694	1.4
559	0.0	627	0.0	695	3.3
560	0.0	628	0.0	696	4.4
561	0.0	629	0.0	697	6.5
562	0.0	630	0.0	698	9.2
563	0.0	631	0.0	699	11.3
564	0.0	632	0.0	700	13.5
565	0.0	633	0.0	701	14.6
566	0.0	634	0.0	702	16.4
567	0.0	635	0.0	703	16.7
568	0.0	636	0.0	704	16.5
569	3.3	637	0.0	705	16.5
570	6.6	638	0.0	706	18.2
571	9.9	639	0.0	707	19.2
572	13.0	640	0.0	708	20.1
573	14.6	641	0.0	709	21.5
574	16.0	642	0.0	710	22.5
575	17.0	643	0.0	711	22.5
576	17.0	644	0.0	712	22.1
577	17.0	645	0.0	713	22.7
578	17.5	646	2.0	714	23.3
579	17.7	647	4.5	715	23.5
580	17.7	648	7.8	716	22.5
581	17.5	649	10.2	717	21.6
582	17.0	650	12.5	718	20.5
583	16.9	651	14.0	719	18.0
584	16.6	652	15.3	720	15.0
585	17.0	653	17.5	721	12.0
586	17.1	654	19.6	722	9.0
587	17.0	655	21.0	723	6.2
588	16.6	656	22.2	724	4.5
589	16.5	657	23.3	725	3.0
590	16.5	658	24.5	726	2.1
591	16.6	659	25.3	727	0.5
592	17.0	660	25.6	728	0.5
593	17.6	661	26.0	729	3.2
594	18.5	662	26.1	730	6.5
595	19.2	663	26.2	731	9.6
596	20.2	664	26.2	732	12.5
597	21.0	665	26.4	733	14.0
598	21.1	666	26.5	734	16.0
599	21.2	667	26.5	735	18.0
600	21.6	668	26.0	736	19.6
601	22.0	669	25.5	737	21.5
602	22.4	670	23.6	738	23.1
603	22.5	671	21.4	739	24.5
604	22.5	672	18.5	740	25.5

APPENDIX A—Continued

APPENDIX A—Continued

APPENDIX A—Continued

Time (sec.)	Speed (m.p.h.)	Time (sec.)	Speed (m.p.h.)	Time (sec.)	Speed (m.p.h.)	Time (sec.)	Speed (m.p.h.)	Time (sec.)	Speed (m.p.h.)	Time (sec.)	Speed (m.p.h.)	Time (sec.)	Speed (m.p.h.)	Time (sec.)	Speed (m.p.h.)
741	26.5	809	34.3	877	28.4	945	25.1	1,013	22.5	1,081	15.0	1,149	10.7	1,217	21.8
742	27.1	810	34.2	878	29.0	946	25.6	1,014	22.0	1,082	12.3	1,150	7.4	1,218	21.5
743	27.6	811	34.0	879	29.2	947	25.1	1,015	21.8	1,083	11.1	1,151	4.1	1,219	21.2
744	27.9	812	34.0	880	29.1	948	24.0	1,016	20.5	1,084	10.6	1,152	0.8	1,220	21.5
745	28.3	813	33.9	881	29.0	949	22.0	1,017	17.5	1,085	10.0	1,153	0.0	1,221	21.8
746	28.6	814	33.6	882	28.9	950	20.1	1,018	14.2	1,086	9.5	1,154	0.0	1,222	22.0
747	28.6	815	33.1	883	28.5	951	16.9	1,019	10.9	1,087	9.1	1,155	0.0	1,223	21.9
748	28.3	816	33.0	884	28.1	952	13.6	1,020	7.6	1,088	8.7	1,156	0.0	1,224	21.7
749	28.2	817	32.5	885	28.0	953	10.3	1,021	4.3	1,089	8.6	1,157	0.0	1,225	21.5
750	28.0	818	32.0	886	28.0	954	7.0	1,022	1.0	1,090	8.8	1,158	0.0	1,226	21.5
751	27.5	819	31.9	887	27.6	955	3.7	1,023	0.0	1,091	9.0	1,159	0.0	1,227	21.4
752	26.8	820	31.6	888	27.2	956	0.4	1,024	0.0	1,092	8.7	1,160	0.0	1,228	20.1
753	25.5	821	31.5	889	26.6	957	0.0	1,025	0.0	1,093	8.6	1,161	0.0	1,229	19.5
754	23.5	822	30.6	890	27.0	958	0.0	1,026	0.0	1,094	8.0	1,162	0.0	1,230	19.2
755	21.5	823	30.0	891	27.5	959	0.0	1,027	0.0	1,095	7.0	1,163	0.0	1,231	19.6
756	19.0	824	29.9	892	27.8	960	2.0	1,028	0.0	1,096	5.0	1,164	0.0	1,232	19.8
757	16.5	825	29.9	893	28.0	961	5.3	1,029	0.0	1,097	4.2	1,165	0.0	1,233	20.0
758	14.9	826	29.9	894	27.8	962	8.6	1,030	0.0	1,098	2.6	1,166	0.0	1,234	19.5
759	12.5	827	29.9	895	28.0	963	11.9	1,031	0.0	1,099	1.0	1,167	0.0	1,235	17.5
760	9.4	828	29.6	896	28.0	964	15.2	1,032	0.0	1,100	0.0	1,168	0.0	1,236	15.5
761	6.2	829	29.5	897	28.0	965	17.5	1,033	0.0	1,101	0.1	1,169	2.1	1,237	13.0
762	3.0	830	29.5	898	27.7	966	18.6	1,034	0.0	1,102	0.6	1,170	5.4	1,238	10.0
763	1.5	831	29.3	899	27.4	967	20.0	1,035	0.0	1,103	1.6	1,171	8.7	1,239	8.0
764	1.5	832	28.9	900	26.9	968	21.1	1,036	0.0	1,104	3.6	1,172	12.0	1,240	6.0
765	0.5	833	28.2	901	26.6	969	22.0	1,037	0.0	1,105	6.9	1,173	15.3	1,241	4.0
766	0.0	834	27.7	902	26.5	970	23.0	1,038	0.0	1,106	10.0	1,174	18.6	1,242	2.5
767	3.0	835	27.0	903	26.5	971	24.5	1,039	0.0	1,107	12.8	1,175	21.1	1,243	0.7
768	6.3	836	25.5	904	26.5	972	26.3	1,040	0.0	1,108	14.0	1,176	23.0	1,244	0.0
769	9.6	837	23.7	905	26.3	973	27.5	1,041	0.0	1,109	14.5	1,177	23.5	1,245	0.0
770	12.9	838	22.0	906	26.2	974	28.1	1,042	0.0	1,110	16.0	1,178	23.0	1,246	0.0
771	15.8	839	20.5	907	26.2	975	28.4	1,043	0.0	1,111	18.1	1,179	22.5	1,247	0.0
772	17.5	840	19.2	908	25.9	976	28.5	1,044	0.0	1,112	20.0	1,180	20.0	1,248	0.0
773	18.4	841	19.2	909	25.6	977	28.5	1,045	0.0	1,113	21.6	1,181	16.7	1,249	0.0
774	19.5	842	20.1	910	25.6	978	28.5	1,046	0.0	1,114	21.2	1,182	13.4	1,250	0.0
775	20.7	843	20.9	911	25.9	979	27.7	1,047	0.0	1,115	21.3	1,183	10.1	1,251	0.0
776	22.0	844	21.4	912	25.8	980	27.5	1,048	0.0	1,116	21.4	1,184	6.8	1,252	1.0
777	23.2	845	22.0	913	25.5	981	27.2	1,049	0.0	1,117	21.7	1,185	3.5	1,253	1.0
778	25.0	846	22.6	914	24.6	982	26.8	1,050	0.0	1,118	22.5	1,186	0.2	1,254	1.0
779	26.5	847	23.2	915	23.5	983	26.5	1,051	0.0	1,119	23.0	1,187	0.0	1,255	1.0
780	27.5	848	24.0	916	22.2	984	26.0	1,052	0.0	1,120	23.8	1,188	0.0	1,256	1.0
781	28.0	849	25.0	917	21.6	985	25.7	1,053	1.2	1,121	24.5	1,189	0.0	1,257	1.6
782	28.3	850	26.0	918	21.6	986	25.2	1,054	4.0	1,122	25.0	1,190	0.0	1,258	3.0
783	28.9	851	26.6	919	21.7	987	24.0	1,055	7.3	1,123	24.9	1,191	0.0	1,259	4.0
784	28.9	852	26.6	920	22.6	988	22.0	1,056	10.6	1,124	24.8	1,192	0.0	1,260	5.0
785	28.9	853	26.8	921	23.4	989	21.5	1,057	13.9	1,125	25.0	1,193	0.0	1,261	6.3
786	28.8	854	27.0	922	24.0	990	21.5	1,058	17.0	1,126	25.4	1,194	0.0	1,262	8.0
787	28.5	855	27.2	923	24.2	991	21.8	1,059	18.5	1,127	25.8	1,195	0.0	1,263	10.0
788	28.3	856	27.8	924	24.4	992	22.5	1,060	20.0	1,128	26.0	1,196	0.0	1,264	10.5
789	28.3	857	28.1	925	24.9	993	23.0	1,061	21.8	1,129	26.4	1,197	0.2	1,265	9.5
790	28.3	858	28.8	926	25.1	994	22.8	1,062	23.0	1,130	26.6	1,198	1.5	1,266	8.5
791	28.2	859	28.9	927	25.2	995	22.8	1,063	24.0	1,131	26.9	1,199	3.5	1,267	7.6
792	27.6	860	29.0	928	25.3	996	23.0	1,064	24.8	1,132	27.0	1,200	6.5	1,268	8.8
793	27.5	861	29.1	929	25.5	997	22.7	1,065	25.6	1,133	27.0	1,201	9.8	1,269	11.0
794	27.5	862	29.0	930	25.2	998	22.7	1,066	26.5	1,134	27.0	1,202	12.0	1,270	14.0
795	27.5	863	28.1	931	25.0	999	22.7	1,067	26.8	1,135	26.9	1,203	12.9	1,271	17.0
796	27.5	864	27.5	932	25.0	1,000	23.5	1,068	27.4	1,136	26.8	1,204	13.0	1,272	19.5
797	27.5	865	27.0	933	25.0	1,001	24.0	1,069	27.9	1,137	26.8	1,205	12.6	1,273	21.0
798	27.5	866	26.8	934	24.7	1,002	24.6	1,070	28.3	1,138	26.5	1,206	12.8	1,274	21.8
799	27.6	867	25.0	935	24.5	1,003	24.8	1,071	28.0	1,139	26.4	1,207	13.1	1,275	22.2
800	28.0	868	24.5	936	24.3	1,004	25.1	1,072	27.5	1,140	26.0	1,208	13.1	1,276	23.0
801	28.5	869	24.8	937	24.3	1,005	25.5	1,073	27.0	1,141	25.5	1,209	14.0	1,277	23.6
802	30.0	870	25.1	938	24.5	1,006	25.6	1,074	27.0	1,142	24.6	1,210	15.5	1,278	24.1
803	31.0	871	25.5	939	25.0	1,007	25.5	1,075	26.3	1,143	23.5	1,211	17.0	1,279	24.5
804	32.0	872	25.7	940	25.0	1,008	25.0	1,076	24.5	1,144	21.5	1,212	18.6	1,280	24.5
805	33.0	873	26.2	941	24.6	1,009	24.1	1,077	22.5	1,145	20.0	1,213	19.7	1,281	24.0
806	33.0	874	26.9	942	24.6	1,010	23.7	1,078	21.5	1,146	17.5	1,214	21.0	1,282	23.5
807	33.6	875	27.5	943	24.1	1,011	23.2	1,079	20.6	1,147	16.0	1,215	21.5	1,283	23.5
808	34.0	876	27.8	944	24.5	1,012	22.9	1,080	18.0	1,148	14.0	1,216	21.8	1,284	23.5

APPENDIX A—Continued

Time (sec.)	Speed (m.p.h.)	Time (sec.)	Speed (m.p.h.)	Time (sec.)	Speed (m.p.h.)
1,353	21.5	1,360	16.5	1,367	0.0
1,354	21.1	1,361	15.5	1,368	0.0
1,355	20.5	1,362	14.0	1,369	0.0
1,356	20.0	1,363	11.0	1,370	0.0
1,357	19.6	1,364	8.0	1,371	0.0
1,358	18.5	1,365	5.2	1,372	0.0
1,359	17.5	1,366	2.5		

APPENDIX B

PROCEDURE FOR DYNAMOMETER ROAD HORSEPOWER CALIBRATION

This appendix describes the method for determining the road horsepower absorbed by a chassis dynamometer. The measured absorbed road horsepower includes the dynamometer friction as well as the power absorbed by the power absorption unit. The dynamometer is driven above the test speed range. The device used to drive the dynamometer is then disengaged from the dynamometer and the roll(s) is allowed to coast down. The kinetic energy of the system is dissipated by the dynamometer friction and absorption unit. This method neglects the variations in roll bearing friction due to the drive axle weight of the vehicle. The difference in coast down time of the free (rear) roll relative to the drive (front) roll may be neglected in the case of dynamometers with paired rolls.

This procedure shall be followed:

1. Devise a method to determine the speed of the drive roll if not already measured. A fifth wheel, revolution pickup or other suitable means may be used.
2. Place a vehicle on the dynamometer or devise another method of driving the dynamometer.
3. Engage inertia flywheel for the most common vehicle weight class for which the dynamometer is used.
4. Drive dynamometer up to 50 m.p.h.
5. Record indicated road horsepower.
6. Drive dynamometer up to 60 m.p.h.
7. Disengage the device used to drive the dynamometer.
8. Record the time for the dynamometer drive roll to coast down from 55 m.p.h. to 45 m.p.h.
9. Adjust the power absorption unit to a different level.
10. Repeat steps 4 to 9 above sufficient times to cover the range of road horsepower used.
11. Calculate absorbed road horsepower from:

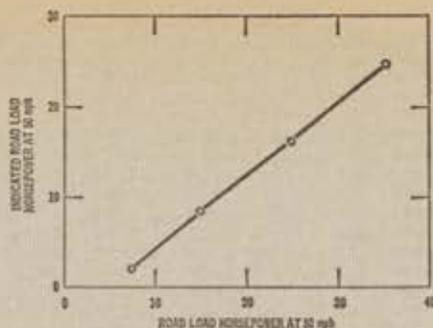
$$HP_d = (1/2) (W_i/32.2) (V_i^2 - V_f^2) / (550t)$$

$$HP_d = 0.00073 (W_i/t)$$

Where:

- W_i = Equivalent inertia in lb.
 V_i = Initial velocity in ft./sec. (55 m.p.h. = 80.67 ft./sec.)
 V_f = Final velocity in ft./sec. (45 m.p.h. = 66 ft./sec.)
 t = Elapsed time for rolls to coast from 55 m.p.h. to 45 m.p.h.

12. Plot indicated road load horsepower at 50 m.p.h. versus road load horsepower at 50 m.p.h.



EXAMPLE: Dynamometer calibration curve (SAE J1264)

13. The road load horsepower reported in § 85.76 is obtained by entering the plot at the indicated road load horsepower determined in § 85.76, (c), (1), (11).

14. Once the road load horsepower at 50 m.p.h. is known for a vehicle, it may be tested on other dynamometers using a similar calibration.

APPENDIX C

CONSTANT VOLUME SAMPLER FLOW CALIBRATION

The following procedure is used in Federal laboratories to calibrate the gas flow of constant volume samplers which use positive displacement pumps. First, the gas flow as a function of the pressure increase across the pump is determined. Second, the whole system, including the instruments, is checked to determine if it accounts for an amount of pure propane or carbon monoxide introduced into the system.

The following steps are followed to determine the gas flow as a function of the pressure increase across the pump, in cubic feet per pump revolution.

1. The pump inlet pressure depression during a typical test is determined.
2. A variable flow restrictor, such as a slide valve, is attached to the CVS at a point upstream of the sample point and the positive displacement pump. The dilution air filter system may or may not be in use during calibration, depending on the particular CVS design.

3. A flow measuring device (laminar flow element) is attached ahead of the flow restrictor.

4. The CVS is operated at several different pump inlet pressure settings (controlled by the flow restrictor) and the measurements as specified in § 85.83 (h), (j), (l), and (m), the time per test, and the measurements related to the flow device are recorded. The data points are equally spaced around the normal operating condition.

5. The gas flow, Q , at each test point is calculated in standard cubic feet per minute from the flow device data.

6. The gas flow (at pump inlet pressure and temperature) is calculated in cubic feet per revolution from the following:

$$V_o = \frac{Q}{n} \times \frac{T_s}{528} \times \frac{760}{P_s}$$

Where:

Q = Gas flow in standard cubic feet per minute.

n = Pump speed in revolution per minute.

See § 81.87 for remainder of definitions.

7. V_o is plotted versus pressure increase across the pump, ΔP .

8. The flow measuring device is removed and attached to the exit of the CVS. Steps No. 4, No. 5, No. 6 and No. 7 are repeated. If the resulting two V_o versus ΔP plots differ significantly, the procedure is repeated with the flow measuring device ahead of the flow restrictor, steps being taken to eliminate the leaks which caused the discrepancy in the original data.

9. If the CVS exhaust system configuration and pressure are constant, the pressure inlet depression is substituted for the independent variable, ΔP .

The following procedure is followed to check the CVS calibration using a known quantity of injected gas. It assumes a reliable analyzer calibration.

1. A small cylinder is charged with pure propane or carbon monoxide gas.

2. The cylinder is weighed.

3. The CVS is operated in the normal manner and a quantity of pure propane or carbon monoxide is released into the system.

4. The calculations of § 85.87 are performed in the normal way except the density of propane (17.30 grams/cu. ft./carbon atom) is used in place of the density of exhaust hydrocarbons.

5. The CVS measured mass is compared to the gravimetric measured mass.

6. The reason for any discrepancy is found and corrected.

APPENDIX D

DURABILITY DRIVING SCHEDULE

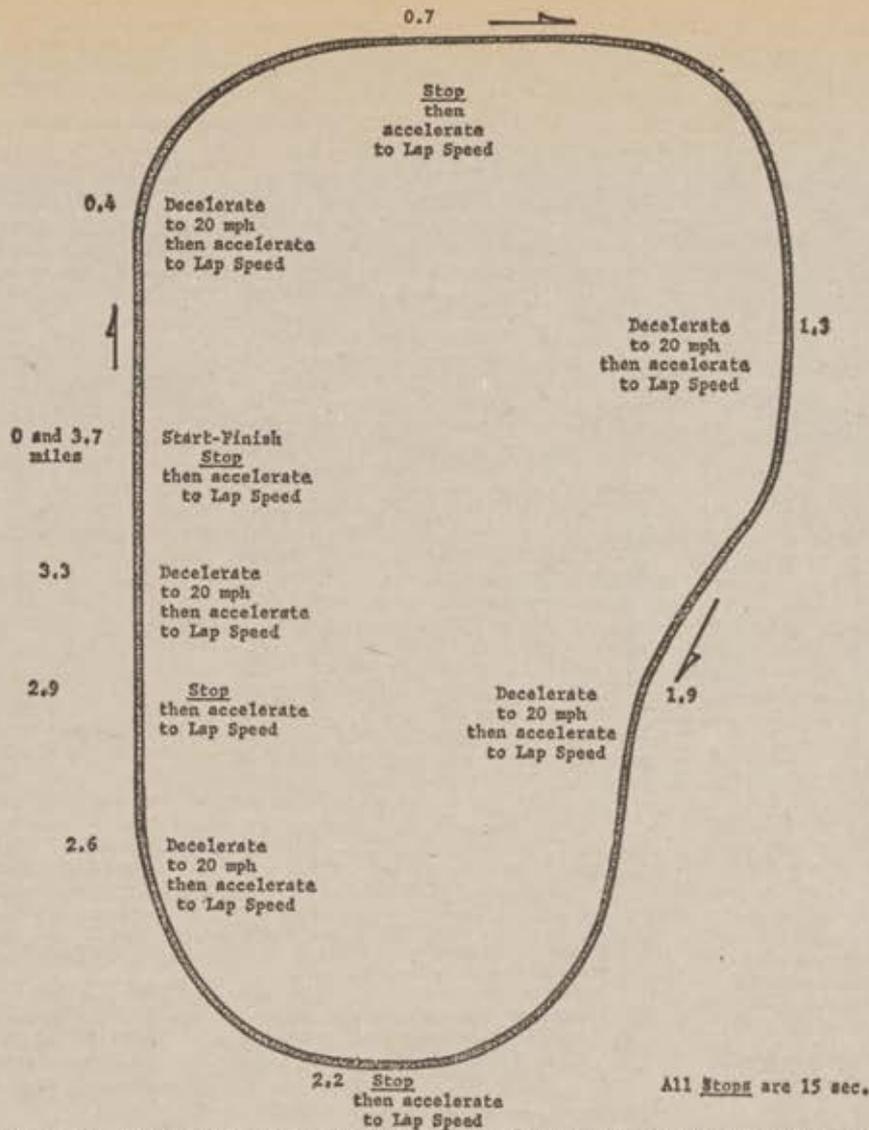
The schedule consists basically of 11 laps of 3.7 mile course. The basic vehicle speed for each lap is listed below:

Lap	Speed- m.p.h.
1	40
2	30
3	40
4	40
5	35
6	30
7	35
8	45
9	35
10	55
11	70

During each of the first nine laps there are 4 stops with 15 second idle. Normal accelerations and decelerations are used. In addition, there are 5 light decelerations each lap from the base speed to 20 m.p.h. followed by light accelerations to the base speed.

The 10th lap is run at a constant speed of 55 m.p.h.

The 11th lap is begun with a wide open throttle acceleration from stop to 70 m.p.h. A normal deceleration to idle followed by a second wide open throttle acceleration occurs at the mid-point of the lap.



APPENDIX E—OXIDES OF NITROGEN ANALYTICAL SYSTEM

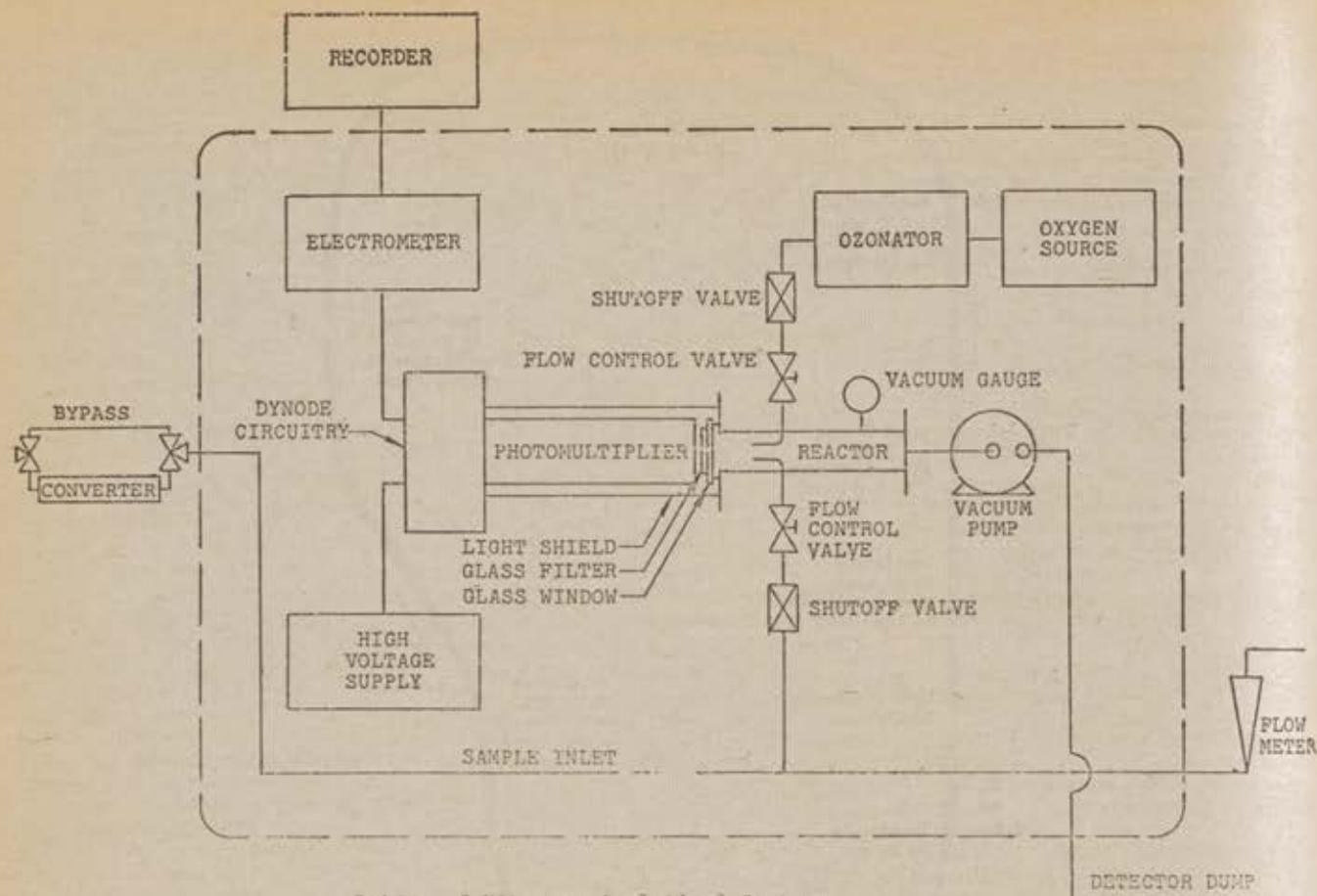
The chemiluminescence method utilizes the principle that nitric oxide (NO) reacts with ozone (O₃) to give nitrogen dioxide (NO₂) and oxygen (O₂). Approximately 10 percent of the NO₂ is electronically excited. The transition of excited NO₂ to the ground state yields a detectable light emission (590-630 nanometer region) at low pressures. The intensity of this emission is proportional to the mass flow rate of NO into the reactor. The light emission can be measured utilizing a photomultiplier tube and associated electronics.

The method also utilizes the principle that the thermal decomposition of NO₂ (2NO₂ → 2NO + O₂) is complete at about 800° C. The rate of constant for the dissociation of NO₂ at 800° C. is approximately 10⁶ (liters/mole-second). A 6-foot length of one-eighth inch

outside diameter, 0.028 wall thickness, flawless stainless steel tubing resistance heated using a low voltage, high current power supply to a temperature of 650° C. (1200° F.) provides sufficient residence time at a sample flow rate of 700 cc. per minute (1.5 c.f.h.) for essentially complete conversion of nitrogen dioxide to nitric oxide. Other converter designs may be used if shown to yield essentially 100 percent conversion of NO₂ to NO.

The method permits continuous monitoring of NO₂ concentrations over a wide range. Response time (2 to 4 seconds is typical) is primarily dependent on the mechanical pumping rate at the operating pressure of the reactor. The operating pressure of the reactor is generally less than 5 torr.

The following figure is a flow schematic illustrating one configuration of the major components required for the oxides of nitrogen analytical system.



Oxides of Nitrogen Analytical System

APPENDIX F

VEHICLE AND ENGINE COMPONENTS

A. Gasoline Fueled Light Duty Vehicles and Heavy Duty Engines.

I. Basic Mechanical Components—Engine:

1. Intake and exhaust valves.
2. Drive belts.
3. Manifold and cylinder head bolts.
4. Engine oil and filter.
5. Engine coolant.
6. Cooling system hoses and connections.
7. Vacuum fittings, hoses and connections.

II. Fuel System

1. Fuel specification—octane rating, lead content.
2. Carburetor—idle r.p.m., mixture ratio.
3. Choke mechanism.
4. Fuel system filter and fuel system lines and connections.
5. Choke plate and linkage.

III. Ignition Components

1. Ignition timing and advance systems.
2. Distributor breaker points and condenser.
3. Spark plugs.
4. Ignition wiring.
5. Operating parts of distributor.

IV. Crankcase Ventilation System:

1. PCV valve.
2. Ventilation hoses.
3. Oil filler breather cap.
4. Manifold inlet (carburetor spacer, etc).

V. External Exhaust Emission Control System:

1. Secondary air injection system hoses.
2. Air system manifolds.
3. Control valves and air pump.
4. Manifold reactors.

5. Catalytic mufflers.
6. Exhaust recirculation.
7. Water injection.

VI. Evaporative Emission Control System:

1. Engine compartment hose connections.
2. Carbon storage media.
3. Fuel tank pressure-relief valve operation.
4. Fuel vapor control valves.

VII. Air Inlet Components

1. Carburetor air cleaner filter.
2. Hot air control valve.

B. Heavy Duty Diesel Engines.

I. Engine Mechanical Components:

1. Valve train.
2. Cooling system.
 - a. Coolant.
 - b. Thermostat.
 - c. Filter.
3. Lubrication.
 - a. Oil Filter.
 - b. Lubricant.

II. Fuel System:

1. Fuel type.
2. Fuel pump.
3. Fuel filters.
4. Injectors.
5. Governor.

III. Air Inlet Components:

1. Air cleaner.
2. Inlet ducting.

IV. External Exhaust Emission Control System

1. Rack limiting devices (aneroid, throttle delay, etc.)
2. Manifold reactor.
3. Catalytic mufflers.
4. Exhaust recirculation.
5. Water injection.

SUBCHAPTER D—WATER PROGRAM

PART 104—STANDARDS-SETTING CONFERENCES, HEARINGS, AND NOTIFICATION OF ALLEGED VIOLATORS OF WATER QUALITY STANDARDS

Sec.	Applicability.
104.1	Applicability.
104.2	Definitions.
104.3	Initiation of proceedings for conferences; appointment of Chairman.
104.4	Organization and general procedures of the conference.
104.5	Notice of conference.
104.6	Service.
104.7	Publication of notice.
104.8	Parties.
104.9	Presentation of material by the Environmental Protection Agency.
104.10	Conference procedure.
104.11	Record of proceedings.
104.12	Preparation, publication, and promulgation of water quality standards; effective date; petition for public hearing.
104.13	Initiation of proceedings for water quality public hearings; appointment of Hearing Board.
104.14	Organization and general procedures of the Hearing Board.
104.15	Notice of hearing.
104.16	Service.
104.17	Publication of notice.
104.18	Parties.

Sec.	
104.19	Presentation of standards and supporting material by the Environmental Protection Agency.
104.20	Hearing procedure.
104.21	Record of proceedings.
104.22	Oral argument.
104.23	Final findings and recommendations.
104.24	Notification of alleged violators of water quality standards.

AUTHORITY: The provisions of this Part 104 issued under sec. 10, 70 Stat. 506, as amended; 33 U.S.C. 1160. Interpret or apply sec. 10(c), 79 Stat. 908, 33 U.S.C. 1160(c).

§ 104.1 Applicability.

The provisions of this part apply to proceedings under section 10(c) (2), (4), and (5) of the Federal Water Pollution Control Act, as amended (79 Stat. 908; 33 U.S.C. 1160(c) (2), (4), and (5)).

§ 104.2 Definitions.

(a) "Act" means the Federal Water Pollution Control Act, as amended (33 U.S.C. 1151 et seq.).

(b) "Chairman" means the Chairman appointed by the Administrator to conduct the conference pursuant to section 10(c) (2) of the Act (33 U.S.C. 1160(c) (2)).

(c) "Agency" means the Environmental Protection Agency.

(d) "Administrator" means the Administrator of the Environmental Protection Agency.

(e) "Assistant Administrator for Media Programs" means the Assistant Administrator for Media Programs in the Environmental Protection Agency.

(f) "Deputy Assistant Administrator for Water Programs" means Deputy Assistant Administrator for Water Programs in the Environmental Protection Agency.

(g) "Water Quality Standards" mean water quality criteria applicable to specific interstate waters and a plan for the implementation and enforcement of such criteria, all of which shall be such as to protect the public health or welfare, enhance the quality of water and serve the purposes of the Act, taking into consideration the use and value of such waters for public water supplies, propagation of fish and wildlife, recreational purposes, and agricultural, industrial and other legitimate uses.

(h) The definitions of terms contained in subsection 10(j) and section 23 of the Act shall be applicable to such terms as used in this part unless the context otherwise requires.

§ 104.3 Initiation of proceedings for conferences; appointment of chairman.

(a) In any case where the Administrator finds that the conditions precedent to his establishment of water quality standards exist, he will give notice of his intention to do so and call a conference in connection therewith. He may fix the time and place of such conference in his notice of intention to establish water quality standards or he may authorize his designee to do so.

(b) The Chairman of such conference shall be the Administrator, or the Assistant Administrator for Media Pro-

grams, or the Deputy Assistant Administrator for Water Programs, in the Environmental Protection Agency or such other employee of that Agency as the Administrator may appoint.

§ 104.4 Organization and general procedures of the conference.

(a) The Chairman shall convene the conference and schedule such other meetings as may be necessary, including meetings for the settlement or simplification of issues.

(b) The Chairman shall preside at all conference sessions and meetings called by him.

(c) The conference shall be conducted in an informal but orderly manner in accordance with this part. Questions of procedure during a conference shall be determined by the Chairman.

(d) The Office of Water Programs in the Environmental Protection Agency shall provide such clerical and technical assistance as may be necessary.

(e) The Chairman shall maintain and have custody of all official records and documents pertaining to the conference and shall perform such other duties related to the functioning of the conference as may be necessary.

(f) The Chairman shall execute, issue or serve such notices, reports, communications, and other documents relating to the functions of the conference as he may deem proper.

§ 104.5 Notice of conference.

(a) The Administrator or the Assistant Administrator for Media Programs or the Deputy Assistant Administrator for Water Programs shall issue and serve notice of a conference as herein provided including the time and place of the conference.

(b) The notice of conference shall briefly describe the location and nature of the interstate waters to be covered by the conference.

(c) The notice shall include the name of the Chairman before whom the conference will be conducted upon a day and at a time and place specified not earlier than thirty (30) days after the service of the notice.

(d) Notice of the conference shall be served on representatives of Federal departments and agencies, interstate agencies, States, municipalities, and industries the Administrator, the Assistant Administrator for Media Programs or the Deputy Assistant Administrator for Water Programs has reason to believe are contributing to, affected by, or have an interest in water quality standards for the waters to be covered by the conference.

§ 104.6 Service.

Notice of the conference may be served by mailing a copy thereof to each person, department, or agency to be served at their residence, office or place of business as ascertained by the Administrator, the Assistant Administrator for Media Programs or the Deputy Assistant Administrator for Water Programs, as the case may be. Service by mail is complete upon mailing.

§ 104.7 Publication of notice.

Notice of the water quality standards-setting conference shall be published in the FEDERAL REGISTER at least thirty (30) days prior to the conference.

§ 104.8 Parties.

(a) The parties to a conference shall include the persons, departments, and agencies specified in § 104.5(d).

(b) The Chairman shall have all the rights of a party to the conference.

(c) Upon application and good cause shown, the Chairman may permit any interested Federal departments and agencies, interstate agencies, States, municipalities, industries or other persons to appear at the conference and be admitted as parties to such extent and upon such terms as the Chairman shall determine proper.

(d) Any party may appear in person or by counsel.

(e) The failure of any party to file an appearance or appear at the conference in response to the notice of conference shall not delay the conference and the Chairman shall proceed, hear, receive statements, make determinations and take other appropriate action affecting such party.

§ 104.9 Presentation of material by the Environmental Protection Agency.

The Administrator, the Assistant Administrator for Media Programs or the Deputy Assistant Administrator for Water Programs shall arrange for the presentation of material concerning the quality of waters to be covered by the conference, the uses, both existing and potential, of such waters, the criteria necessary to protect such uses, the person or persons, if any, contributing or discharging any matter affecting the quality of such waters, and remedial measures, if any, recommended by the Environmental Protection Agency.

§ 104.10 Conference procedure.

(a) Persons making statements need not be sworn or make affirmation. Each party shall be given an opportunity to make a statement concerning the water quality standards for the waters covered by the conference, an opportunity after all parties have been heard to make a further statement which may include comments on or rebuttal of other parties' views, and an opportunity to make recommendation for water quality standards in either his first or subsequent statement.

(b) When necessary, in order to prevent undue prolongation of the conference, the Chairman may limit the number of times any party may make a statement and may direct that further statements be made in writing.

(c) The Chairman shall exclude irrelevant, immaterial or unduly repetitious material.

§ 104.11 Record of proceedings.

(a) Statements given and other procedures of a formal conference shall be reported verbatim. A transcript of such report shall be a part of the record and

the sole official transcript of the proceedings.

(b) All statements, charts, tabulations and other data shall be received in the record. If a party to a proceeding under this section objects to the admissibility of such material, the objection shall be noted and the Chairman shall have a right to rule thereon.

(c) When the statement refers to a statute, or a report or document, the Chairman shall, after satisfying himself of the identification of such statute, report or document, determine whether the same shall be produced at the conference and physically be made part of the record or shall be incorporated in the record by reference.

(d) The Chairman may take official notice of statutes of States and of duly promulgated regulations of any Federal or State agency.

(e) The Chairman shall submit to the Administrator the verbatim transcript including all charts, tabulations, and similar data which are part of the conference record.

§ 104.12 Preparation, publication, and promulgation of water quality standards; effective date; petition for public hearing.

(a) Subsequent to submission of the conference transcript and record, the Administrator shall prepare regulations setting forth water quality standards for interstate waters or portions thereof which were covered by the conference. Such regulations shall be published as part of a notice of proposed rule making in the FEDERAL REGISTER.

(b) After publication of such regulations and notice of proposed rule making, interested persons may submit written data, views, or arguments in triplicate in regard to the regulations setting forth water quality standards to the Administrator, Environmental Protection Agency, Washington, D.C. 20460. All relevant material received not later than 90 days after such publication will be considered.

(c) If, within 6 months from the date the Administrator publishes such regulations, the State has not adopted water quality standards found by the Administrator to be consistent with section 10(c)(3) of the Act, or a petition for public hearing has not been filed under section 10(c)(4) of the Act and § 104.12(d), the Administrator shall promulgate water quality standards by publication thereof in the FEDERAL REGISTER. Such water quality standards shall be effective thirty (30) days after such publication unless a petition for public hearing has been first filed under section 10(c)(4) of the Act and § 104.12(d).

(d) At any time prior to thirty (30) days after water quality standards have been promulgated under § 104.12(c), the Governor of any State affected by such standards may petition the Administrator for a public hearing under section 10(c)(4) of the Act. A petition for a public hearing need not observe any fixed form, but it must be in writing directed to the Administrator and state that the petitioning Governor desires the

Administrator to call a public hearing with respect to water quality standards under section 10(c)(4) of the Act, identifying the interstate waters with respect to which such hearing is to be called.

§ 104.13 Initiation of proceedings for water quality public hearings; appointment of Hearing Board.

(a) In any case where the Administrator finds that the conditions precedent to the calling of a water quality public hearing under the Act exist, he will call such a hearing, and may either fix the time and place thereof, or authorize the Assistant Administrator for Media Programs or the Deputy Assistant Administrator for Water Programs to do so.

(b) Prior to the hearing, the Administrator will appoint a Hearing Board of five or more persons, as provided in the Act, and will designate one of the members as chairman. A majority of the Hearing Board shall be persons other than officers or employees of the Agency. The Administrator may revoke appointment to the Hearing Board in the event of disability of a member or for other cause, and may fill any vacancy in the membership of the Hearing Board, or in the office of Chairman. The Secretary of Commerce, the Secretary of Health, Education, and Welfare, other affected Federal departments and agencies, and each State which would be affected by such standards shall each be given an opportunity to select a member of the Hearing Board and shall further be given an opportunity to select another person to fill any vacancy resulting from the resignation or revocation of appointment of any member originally so selected.

§ 104.14 Organization and general procedures of the Hearing Board.

(a) The Chairman shall convene the Hearing Board for hearing sessions and for such other meetings as may be necessary.

(b) The Chairman shall preside at all hearing sessions and meetings of the Hearing Board. In case of the absence or incapacity of the Chairman, the Hearing Board may elect from its members an acting chairman to preside and to perform the duties of the Chairman.

(c) The hearing shall be conducted in an informal but orderly manner in accordance with this part. A quorum of the Hearing Board for the purpose of the hearing shall consist of not less than five members. Questions of procedure during a hearing shall be determined by the Chairman. Rulings of the Chairman may be appealed to the Hearing Board.

(d) The Hearing Board shall have the power to rule upon offers of proof and the admissibility of evidence, to receive relevant evidence, to examine witnesses and parties, to regulate the course of the hearing, to change the time and place of the hearing or any of its sessions upon reasonable notice to the parties, and to hold conferences for the settlement or simplification of issues.

(e) The Deputy Assistant Administrator for Water Programs shall provide for the Hearing Board such clerical and

technical assistance as may be necessary.

(f) The Hearing Board shall designate an executive secretary, from personnel provided by the Deputy Assistant Administrator for Water Programs, who shall maintain and have custody of all official records and other documents pertaining to the functions of the Hearing Board, and shall perform such other duties related to its functions as the Hearing Board may prescribe.

(g) The Hearing Board may authorize the Chairman and the executive secretary on its behalf to execute, issue or serve such notices, reports, communications, and other documents relating to the functions of the Hearing Board as it may deem proper.

§ 104.15 Notice of hearing.

(a) The Administrator, Assistant Administrator for Media Programs, or the Deputy Assistant Administrator for Water Programs shall issue and serve notice of hearing as herein provided.

(b) The notice of hearing shall briefly describe the location and nature of the interstate waters to be covered by the hearing and the water quality regulations therefor, if any, prepared pursuant to section 10(c)(2) of the Act.

(c) The notice shall include the names of the persons constituting the Hearing Board before whom the hearing will be held and shall designate a day, a time and place therefor not earlier than thirty (30) days after the service of the notice.

(d) Notice of the hearing shall be served on representatives of Federal departments and agencies, interstate agencies, States, municipalities and industries the Administrator, Assistant Administrator for Media Programs, or the Deputy Assistant Administrator for Water Programs has reason to believe are contributing to, affected by, or have an interest in water quality standards for the waters to be covered by the hearing.

§ 104.16 Service.

Notice of the hearing and other documents relating to the function of the hearing may be served by mailing a copy thereof to each person, department, or agency to be served at their residence, office or place of business as ascertained by the Administrator, Assistant Administrator for Media Programs, or the Deputy Assistant Administrator for Water Programs, as the case may be. Service by mail is complete upon mailing.

§ 104.17 Publication of notice.

Notice of the public hearing shall be published in the FEDERAL REGISTER at least thirty (30) days prior to the hearing.

§ 104.18 Parties.

(a) The parties to a hearing shall include the persons and agencies specified in § 104.15(d).

(b) The Deputy Assistant Administrator for Water Programs shall have all the rights of a party to the hearing.

(c) Upon application and good cause shown, the Hearing Board may permit

any interested person or agency to appear before it and be admitted as a party to such extent and upon such terms as the Hearing Board shall determine proper.

(d) Any party may appear in person or by counsel.

(e) The failure of any party to file an appearance or appear at the hearing in response to the notice of hearing shall not delay the hearing and the Hearing Board may proceed, hear and receive evidence and take other appropriate action affecting such party.

§ 104.19 Presentation of standards and supporting material by the Deputy Assistant Administrator for Water Programs.

The Deputy Assistant Administrator for Water Programs shall arrange for the presentation of the regulations, if any, prepared by the Administrator and setting forth the standards of water quality for the waters covered by the hearing, and such other material as he deems relevant to the issues in the hearing.

§ 104.20 Hearing procedure.

(a) Each witness shall, before testifying, be sworn or make affirmation.

(b) When necessary, in order to prevent undue prolongation of the hearing, the Hearing Board may limit the number of times any witness may testify, the repetitious examination or cross-examination of witnesses or the amount of corroborative or cumulative testimony.

(c) The Hearing Board shall exclude irrelevant, immaterial or unduly repetitious evidence.

(d) Every party shall have the right to present evidence and cross-examine witnesses.

§ 104.21 Record of proceedings.

(a) Testimony given and other proceedings had at a hearing shall be reported verbatim. A transcript of such report shall be a part of the record and the sole official transcript of the proceedings.

(b) All written statements, charts, tabulations, and similar data offered in evidence at the hearing shall, upon a showing satisfactory to the Hearing Board of their authenticity, relevancy, and materiality, be received in evidence and shall constitute a part of the record.

(c) Where the testimony of a witness refers to a statute, or a report or document, the Hearing Board shall, after satisfying itself of the identification of such statute, report or document, determine whether the same shall be produced at the hearing and physically be made a part of the record or shall be incorporated in the record by reference.

(d) The Hearing Board may take official notice of statutes of the United States or of any State and of duly promulgated regulations of any Federal or State agency.

(e) The Hearing Board may take official notice of a material fact not appearing in the evidence in the record, but any party, prior to the conclusion of the hearing, shall be afforded an opportunity to show the contrary.

§ 104.22 Oral argument.

Oral argument may be permitted in the discretion of the Hearing Board, and shall be reported as part of the record unless otherwise ordered by the Hearing Board.

§ 104.23 Final findings and recommendations.

(a) The Hearing Board shall make its final findings, conclusions, and recommendations, if any, based on the evidence presented at the hearing, and submit the same to the Administrator.

(b) Upon submission of such findings, conclusions, and recommendations, the Hearing Board shall be terminated and all records pertaining to its functions transferred to the custody of the Deputy Assistant Administrator for Water Programs.

(c) A copy of the findings, conclusions, and recommendations, if any, of the Hearing Board shall be served on all parties to the hearing by the Administrator and the Administrator shall cause their publication in the FEDERAL REGISTER.

§ 104.24 Notification of alleged violators of water quality standards.

The Administrator shall notify those persons responsible for the discharge of matter into interstate waters or portions thereof which is not in compliance with the water quality standards established under section 10 of the Act (whether the matter causing or contributing to such violation is discharged directly into such waters or reaches such waters after discharge into tributaries of such waters) and other interested parties of the alleged violation of such standards. In all such notices, the Administrator shall designate a time when and place where any person receiving such notice may appear before and participate in an informal hearing before the Administrator, his designee, or such Board as he may appoint relative to the alleged violation of standards so that, if possible, there can be voluntary agreement reached as to appropriate remedial action.

PART 106—PUBLIC HEARINGS UNDER THE FEDERAL WATER POLLUTION CONTROL ACT

Sec. 106.1	Applicability.
106.2	Definitions.
106.3	Initiation of proceedings for public hearings; appointment of Board.
106.4	Organization and general procedures of the Board.
106.5	Notice of hearing.
106.6	Service.
106.7	Publication of notice.
106.8	Parties.
106.9	Presentation of evidence by the Environmental Protection Agency.
106.10	Hearing procedure.
106.11	Records of proceedings.
106.12	Oral argument.
106.13	Final findings and recommendations.

AUTHORITY: The provisions of this Part 106 issued under sec. 10, 70 Stat. 505, 506; 33 U.S.C. 1160.

§ 106.1 Applicability.

The provisions of this part apply to proceedings under section 10 of the Federal Water Pollution Control Act (70 Stat. 504; 33 U.S.C. 1160.)

§ 106.2 Definitions.

As used in this part:

(a) "Act" means the Federal Water Pollution Control Act, 70 Stat. 498, 33 U.S.C. 1151, et seq.

(b) "Board" means the board appointed by the Administrator pursuant to section 10 of the Act (33 U.S.C. 1160).

(c) "Agency" means the Environmental Protection Agency.

(d) "Pollution" means any pollution declared to be subject to abatement by section 10 of the Act (33 U.S.C. 1160).

(e) "Administrator" means the Administrator of the Environmental Protection Agency.

(f) "Deputy Assistant Administrator for Water Programs" means the Deputy Assistant Administrator for Water Programs in the Environmental Protection Agency.

(g) The definitions of terms contained in section 10 of the Act (33 U.S.C. 1160) shall be applicable to such terms as used in this part unless the context otherwise requires.

§ 106.3 Initiation of proceedings for public hearings; appointment of Board.

(a) In any case where the Administrator finds that the conditions precedent to the calling of a public hearing under the Act exist, he will call such a hearing, and may either fix the time and place thereof, or authorize the Deputy Assistant Administrator for Water Programs to do so.

(b) Prior to the hearing, the Administrator will appoint a hearing board of five or more persons, as provided in the act, and will designate one of the members as chairman. A majority of the Board shall be persons other than officers or employees of the Agency. The Administrator may revoke appointment to the Board in the event of disability of a member, and may fill any vacancy in the membership of the Board, or in the office of chairman.

§ 106.4 Organization and general procedures of the Board.

(a) The chairman shall convene the Board for hearing sessions and for such other meetings as may be necessary.

(b) The chairman shall preside at all hearing sessions and meetings of the Board. In case of the absence or incapacity of the chairman, the Board may elect from its members an acting chairman to preside and perform the duties of the chairman.

(c) The hearing shall be conducted in an informal but orderly manner in accordance with this part. A quorum of the Board for the purpose of the hearing shall consist of not less than five members. Questions of procedure during a hearing shall be determined by the

chairman. Rulings of the chairman may be appealed to the Board.

(d) The Board shall have the power to rule upon offers of proof and the admissibility of evidence, to receive relevant evidence, to examine witnesses, to regulate the course of the hearing, to change the time and place of the hearing or any of its sessions upon reasonable notice to the parties, and to hold conferences for the settlement or simplification of issues.

(e) The Deputy Assistant Administrator for Water Programs shall provide for the Board such clerical and technical assistance as may be necessary.

(f) The Board shall designate an executive secretary, from personnel provided by the Deputy Assistant Administrator for Water Programs, who shall maintain and have custody of all official records and other documents pertaining to the functions of the Board, and shall perform such other duties related to its functions as the Board may prescribe.

(g) The Board may authorize the chairman and the executive secretary on its behalf to execute, issue or serve such notices, reports, communications, and other documents relating to the functions of the Board as it may deem proper.

§ 106.5 Notice of hearing.

(a) The Deputy Assistant Administrator for Water Programs shall issue and serve notice of hearing as herein provided and, if the time and place of the hearing have not been fixed by the Administrator, shall fix such time and place.

(b) The notice of hearing shall identify the person or persons discharging any matter causing or contributing to the pollution, and briefly describe the nature of the discharge or discharges and the interstate waters affected thereby. The notice shall include the names of the persons constituting the Board before whom the hearing will be held upon a day and at a time and place specified not earlier than three (3) weeks after the service of the notice.

(c) Notice of hearing shall be served on the following:

(1) Each person named in the notice as discharging any matter causing or contributing to pollution; and the water pollution control agency or interstate agency to whom formal notification of such pollution has previously been given in accordance with the Act.

(2) The water pollution control agency or the interstate agency of the State or States, other than that in which the discharge originates, claiming to be adversely affected by such pollution.

§ 106.6 Service.

Notice of hearing, findings, conclusions and recommendations of the Board, and any other documents relating to the functions of the Board, may be served by mailing a copy thereof addressed to each person or agency to be served at their respective residences, offices or place of business as ascertained by the Deputy Assistant Administrator for Water Programs or the Board, as the case may be.

§ 106.7 Publication of notice.

Notice of the public hearing shall be published in the FEDERAL REGISTER at least three (3) weeks prior to the hearing.

§ 106.8 Parties.

(a) The parties to a hearing shall include the persons and agencies specified in § 106.5(c).

(b) The Deputy Assistant Administrator for Water Programs shall have all the rights of a party to the hearing.

(c) Upon application and good cause shown, the Board may permit any interested person or agency to appear before it and be admitted as a party to such extent and upon such terms as the Board shall determine proper.

(d) Any party may appear in person or by counsel.

(e) The failure of any party to file an appearance or appear at the hearing in response to the notice of hearing shall not delay the hearing and the Board may proceed, hear and receive evidence and take other appropriate action affecting such party.

§ 106.9 Presentation of evidence by the Deputy Assistant Administrator for Water Programs.

The Deputy Assistant Administrator for Water Programs shall arrange for the presentation of evidence concerning the pollution, the person or persons discharging any matter causing or contributing to the pollution and remedial measures, if any, recommended by him.

§ 106.10 Hearing procedure.

(a) Each witness shall, before testifying, be sworn or make affirmation.

(b) When necessary, in order to prevent undue prolongation of the hearing, the Board may limit the number of times any witness may testify, the repetitious examination or cross-examination of witnesses or the amount of corroborative or cumulative testimony.

(c) The Board shall exclude irrelevant, immaterial or unduly repetitious evidence.

(d) Every party shall have the right to present evidence and cross-examine witnesses.

§ 106.11 Record of proceedings.

(a) Testimony given and other proceedings had at a hearing shall be reported verbatim. A transcript of such report shall be a part of the record and the sole official transcript of the proceedings.

(b) All written statements, charts, tabulations and similar data offered in evidence at the hearing shall, upon a showing satisfactory to the Board of their authenticity, relevancy and materiality, be received in evidence and shall constitute a part of the record.

(c) Where the testimony of a witness refers to a statute, or a report or document, the Board shall, after satisfying itself of the identification of such statute, report or document, determine whether the same shall be produced at the hearing and physically be made a

part of the record or shall be incorporated in the record by reference.

(d) The Board may take official notice of statutes of the United States or of any State and of duly promulgated regulations of any Federal agency.

(e) The Board may take official notice of a material fact not appearing in the evidence in the record, but any party, prior to the conclusion of the hearing, shall be afforded an opportunity to show the contrary.

§ 106.12 Oral argument.

Oral argument may be permitted in the discretion of the Board, and shall be reported as part of the record unless otherwise ordered by the Board.

§ 106.13 Final findings and recommendations.

(a) The Board shall make its final findings, conclusions and recommendations, if any, based on the evidence presented at the hearing, and submit the same to the Administrator.

(b) Upon submission of such findings, conclusions and recommendations, the Board shall be terminated and all records pertaining to its functions transferred to the custody of the Deputy Assistant Administrator for Water Programs.

(c) A copy of the findings, conclusions, and recommendations, if any, of the Board shall be served on all parties to the hearing by the Administrator.

PART 107—FILING OF REPORTS WITH THE ADMINISTRATOR BY PERSONS WHOSE ALLEGED ACTIVITIES RESULT IN DISCHARGES CAUSING OR CONTRIBUTING TO WATER POLLUTION

Sec.	
107.1	Applicability.
107.2	Definitions.
107.3	Initiation of request for report.
107.4	Service.
107.5	Report; form and content, time for submission.
107.6	Protection of trade secrets; confidential information.
107.7	Penalties.

AUTHORITY: The provisions of this Part 107 issued under sec. 10(k) as amended, 80 Stat. 1250; sec. 22(a), as amended, 75 Stat. 204; 33 U.S.C. 1160(k), 1172(a).

§ 107.1 Applicability.

The provisions of this part apply to reports requested or required by the Administrator to be filed with him by any person whose alleged activities result in discharges causing or contributing to water pollution. The Administrator is authorized to request such reports to be filed at the request of a majority of the conferees in any conference and to require such reports in connection with any hearing called under section 10 of the Federal Water Pollution Control Act, as amended. (80 Stat. 1250; 33 U.S.C. 1160 (f) (2), (3), and (4), and (k))

§ 107.2 Definitions.

(a) "Act" means the Federal Water Pollution Control Act, as amended (33 U.S.C. 1151 et seq.).

(b) "Agency" means the Environmental Protection Agency.

(c) "Administrator" means the Administrator of the Environmental Protection Agency.

(d) The definitions of terms contained in sections 10 and 23 of the act shall be applicable to such terms as used in this part unless the context otherwise requires.

§ 107.3 Initiation of request for report.

(a) The Administrator at the request of a majority of the conferees in any conference may request, or in connection with any public hearing called under section 10 of the Federal Water Pollution Control Act, as amended, may require any person whose alleged activities result in discharges causing or contributing to water pollution of the subject waters of such conference or public hearing to file with him a report as to the character, kind and quantity of such discharges and the use of facilities or other means to prevent or reduce such discharges by the person filing such report.

(b) When the Administrator finds that the conditions precedent to the requesting or requiring of such report or reports have been met he may request or require in writing the submission to him of such report in the time, form and content as herein provided.

(c) The request for or requirement of such report shall be served on any person whose alleged activities result in discharges causing or contributing to the pollution of waters in the matter of which the conference or the public hearing has been called.

§ 107.4 Service.

The written request for or requirement of such report may be served by mailing a copy thereof to the person whose alleged activities result in discharges causing or contributing to the pollution of waters subject to the conference or to the public hearing, or in the case of a corporation, partnership, association, State, municipality, other political subdivision of a State, upon an authorized representative thereof at his residence, office or place of business as ascertained by the Administrator.

§ 107.5 Report; form and content, time for submission.

(a) No particular form for such reporting will be required unless specified within the written request for or requirement of such report.

(b) Such report shall detail, based on existing data, and covering such period as the Administrator may direct, all pertinent and useful information as to the character, kind and quantity of the discharges, treated, or untreated, alleged to be causing or contributing to the pollution of the waters. The reported data shall identify the causes and sources of the alleged pollutional discharges and shall include but not be limited to applicable information as to the physical, chemical, or biological properties of any liquid, gaseous, solid, radioactive, or other substance composing the discharges in whole or in part. Thermal

characteristics of the discharges and the level of heat in flow shall be included in the reported data. Where available in existing data, twenty-four (24) hour daily average quantities of discharges, in whole and of separate individual component substances shall be stated either in units of pounds per day or, as measurable in concentration, in milligrams per liter. Peak hourly discharge quantities, in whole, in combination, or of separate individual component substances, which exceed such twenty-four (24) hour daily average by twenty (20) percent or more shall be noted.

(c) Facilities or other means used to prevent or reduce such discharges shall be reported and described in sufficient detail, including pertinent plans and specifications, to permit a technical judgment of the present and future effectiveness of such facilities or other means, together with any specific data the Administrator may reasonably consider necessary and useful. Plans for future improvement of existing facilities or other means or for the installation of new facilities or other means may be included, together with a projected timetable for their planning and installation, at the option of the respondent.

(d) Five (5) copies of the report shall be furnished. It shall be directed to the Administrator, be dated, clearly identify the subject matter of the report, bear the name, address and telephone number of the reporting person and shall be signed by such person, or in the case of a corporation, municipality or other political subdivision, by a duly authorized officer thereof. The report shall be clearly typed, printed, or duplicated and shall be securely stapled or otherwise fastened. Each page shall be numbered and in proper sequence. Any exhibits shall be included in or securely attached to the report.

(e) Such reports shall be filed with the Administrator within such time as specified in his written request or requirement which shall not be less than thirty (30) days from the date of the request or requirement unless the Administrator finds that an emergency exists requiring the report to be furnished in a shorter time, or unless an extension for good cause shown is requested of and granted by the Administrator in writing.

§ 107.6 Protection of trade secrets; confidential information.

No person shall be required in such report to divulge trade secrets or secret processes and all information reported shall be considered confidential for the purposes of section 1905 of title 18 of the United States Code which provides:

Whoever, being an officer or employee of the United States or of any department or agency thereof, publishes, divulges, discloses, or makes known in any manner or to any extent not authorized by law any information coming to him in the course of his employment or official duties or by reason of any examination or investigation made by, or return, report or record made to or filed with, such department or agency or officer or employee thereof, which information concerns or relates to the trade secrets,

processes, operations, style of work, or apparatus, or to the identity, confidential statistical data, amount or source of any income, profits, losses, or expenditures of any person, firm, partnership, corporation, or association; or permits any income return or copy thereof of any book containing any abstract or particulars thereof to be seen or examined by any persons except as provided by law; shall be fined not more than \$1,000, or imprisoned not more than 1 year, or both; and shall be removed from office or employment. June 25, 1948. c. 645, 62 Stat. 791.

§ 107.7 Penalties.

(a) If any person fails to file a report required by the Administrator in connection with any public hearing within the time set for the filing of such report and such failure shall continue for thirty (30) days after written notice of such default given by the Administrator to such persons by registered or certified mail at his last known address, such person shall forfeit to the United States the sum of \$100 for each and every day of continued default following immediately upon the expiration of the thirtieth (30th) day after the Administrator has given written notice; such forfeiture to be paid into the Treasury of the United States.

(b) If any person, having agreed to submit a report to any conference, fails to file a report requested by the Administrator in response to a request of a majority of the conferees in such conference within the time set for the filing of such report and such failure shall continue for thirty (30) days after written notice of such default given by the Administrator to such person by registered or certified mail at his last known address, the Administrator shall forthwith report such failure to the conferees.

(c) A majority of the conferees of said conference may order such person to be subject to a forfeiture of \$100 for each and every day of continued default following immediately upon the expiration of the thirtieth (30th) day after the Administrator has given written notice; such forfeiture to be paid into the Treasury of the United States.

(d) Such forfeitures, without demand or further notice, may be recovered in a civil suit in the name of the United States brought in the district in which such person has his principal office or in which he does business.

(e) The Administrator may, upon timely application therefor, remit or mitigate any forfeiture and he shall have authority to determine the facts upon all such applications.

PART 109—CRITERIA FOR STATE, LOCAL AND REGIONAL OIL REMOVAL CONTINGENCY PLANS

- Sec. 109.1 Applicability.
- 109.2 Definitions.
- 109.3 Purpose and scope.
- 109.4 Relationship to Federal response actions.
- 109.5 Development and implementation criteria for State, local and regional oil removal contingency plans.
- 109.6 Coordination.

Authority: The provisions of this Part 109 issued under sec. 11 (j) (1) (B), 84 Stat. 96, 33 U.S.C. 1161 (j) (1) (B).

§ 109.1 Applicability.

The criteria in this part are provided to assist State, local and regional agencies in the development of oil removal contingency plans for the inland navigable waters of the United States and all areas other than the high seas, coastal and contiguous zone waters, coastal and Great Lakes ports and harbors and such other areas as may be agreed upon between the Environmental Protection Agency and the Department of Transportation in accordance with section 11(j)(1)(B) of the Federal Act, Executive Order No. 11548 dated July 20, 1970 (35 F.R. 11677) and section 306.2 of the National Oil and Hazardous Materials Pollution Contingency Plan (35 F.R. 8511).

§ 109.2 Definitions.

As used in these guidelines, the following terms shall have the meaning indicated below:

(a) "Oil" means oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil.

(b) "Discharge" includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, or dumping.

(c) "Remove" or "removal" refers to the removal of the oil from the water and shorelines or the taking of such other actions as may be necessary to minimize or mitigate damage to the public health or welfare, including, but not limited to, fish, shellfish, wildlife, and public and private property, shorelines, and beaches.

(d) "Major disaster" means any hurricane, tornado, storm, flood, high water, wind-driven water, tidal wave, earthquake, drought, fire, or other catastrophe in any part of the United States which, in the determination of the President, is or threatens to become of sufficient severity and magnitude to warrant disaster assistance by the Federal Government to supplement the efforts and available resources of States and local governments and relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby.

(e) "United States" means the States, the District of Columbia, the Commonwealth of Puerto Rico, the Canal Zone, Guam, American Samoa, the Virgin Islands, and the Trust Territory of the Pacific Islands.

(f) "Federal Act" means the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1151, et seq.

§ 109.3 Purpose and scope.

The guidelines in this part establish minimum criteria for the development and implementation of State, local, and regional contingency plans by State and local governments in consultation with private interests to insure timely, efficient, coordinated and effective action to minimize damage resulting from oil discharges. Such plans will be directed toward the protection of the public health or welfare of the United States, includ-

ing, but not limited to, fish, shellfish, wildlife, and public and private property, shorelines, and beaches. The development and implementation of such plans shall be consistent with the National Oil and Hazardous Materials Pollution Contingency Plan. State, local and regional oil removal contingency plans shall provide for the coordination of the total response to an oil discharge so that contingency organizations established thereunder can function independently, in conjunction with each other, or in conjunction with the National and Regional Response Teams established by the National Oil and Hazardous Materials Pollution Contingency Plan.

§ 109.4 Relationship to Federal response actions.

The National Oil and Hazardous Materials Pollution Contingency Plan provides that the Federal on-scene commander shall investigate all reported spills. If such investigation shows that appropriate action is being taken by either the discharger or non-Federal entities, the Federal on-scene commander shall monitor and provide advice or assistance, as required. If appropriate containment or cleanup action is not being taken by the discharger or non-Federal entities, the Federal on-scene commander will take control of the response activity in accordance with section 11(c)(1) of the Federal Act.

§ 109.5 Development and implementation criteria for State, local and regional oil removal contingency plans.

Criteria for the development and implementation of State, local and regional oil removal contingency plans are:

(a) Definition of the authorities, responsibilities and duties of all persons, organizations or agencies which are to be involved or could be involved in planning or directing oil removal operations, with particular care to clearly define the authorities, responsibilities and duties of State and local governmental agencies to avoid unnecessary duplication of contingency planning activities and to minimize the potential for conflict and confusion that could be generated in an emergency situation as a result of such duplications.

(b) Establishment of notification procedures for the purpose of early detection and timely notification of an oil discharge including:

(1) The identification of critical water use areas to facilitate the reporting of and response to oil discharges.

(2) A current list of names, telephone numbers and addresses of the responsible persons and alternates on call to receive notification of an oil discharge as well as the names, telephone numbers and addresses of the organizations and agencies to be notified when an oil discharge is discovered.

(3) Provisions for access to a reliable communications system for timely notification of an oil discharge and incorporation in the communications system of the capability for interconnection with

the communications systems established under related oil removal contingency plans, particularly State and National plans.

(4) An established, prearranged procedure for requesting assistance during a major disaster or when the situation exceeds the response capability of the State, local or regional authority.

(c) Provisions to assure that full resource capability is known and can be committed during an oil discharge situation including:

(1) The identification and inventory of applicable equipment, materials and supplies which are available locally and regionally.

(2) An estimate of the equipment, materials and supplies which would be required to remove the maximum oil discharge to be anticipated.

(3) Development of agreements and arrangements in advance of an oil discharge for the acquisition of equipment, materials and supplies to be used in responding to such a discharge.

(d) Provisions for well defined and specific actions to be taken after discovery and notification of an oil discharge including:

(1) Specification of an oil discharge response operating team consisting of trained, prepared and available operating personnel.

(2) Predesignation of a properly qualified oil discharge response coordinator who is charged with the responsibility and delegated commensurate authority for directing and coordinating response operations and who knows how to request assistance from Federal authorities operating under existing national and regional contingency plans.

(3) A preplanned location for an oil discharge response operations center and a reliable communications system for directing the coordinated overall response operations.

(4) Provisions for varying degrees of response effort depending on the severity of the oil discharge.

(5) Specification of the order of priority in which the various water uses are to be protected where more than one water use may be adversely affected as a result of an oil discharge and where response operations may not be adequate to protect all uses.

(e) Specific and well defined procedures to facilitate recovery of damages and enforcement measures as provided for by State and local statutes and ordinances.

§ 109.6 Coordination.

For the purposes of coordination, the contingency plans of State and local governments should be developed and implemented in consultation with private interests. A copy of any oil removal contingency plan developed by State and local governments should be forwarded to the Council on Environmental Quality upon request to facilitate the coordination of these contingency plans with the National Oil and Hazardous Materials Pollution Contingency Plan.

PART 110—DISCHARGE OF OIL

- Sec.
- 110.1 Definitions.
- 110.2 Applicability.
- 110.3 Discharge into navigable waters harmful.
- 110.4 Discharge into contiguous zone harmful.
- 110.5 Discharge prohibited.
- 110.6 Exception for vessel engines.
- 110.7 Dispersants.
- 110.8 Demonstration projects.
- 110.9 Notice.

AUTHORITY: The provisions of this Part 110 issued under sec. 11(b) (3), as amended, 84 Stat. 92; 33 U.S.C. 1161.

§ 110.1 Definitions.

As used in this part, the following terms shall have the meaning indicated below:

(a) "Oil" means oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, oil mixed with ballast or bilge, and oil mixed with wastes other than dredged spoil;

(b) "Discharge" includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying or dumping;

(c) "Vessel" means every description of watercraft or other artificial contrivance used, or capable of being used, as a means of transportation on water other than a public vessel;

(d) "Public vessel" means a vessel owned or bare-boat chartered and operated by the United States, or by a State or political subdivision thereof, or by a foreign nation, except when such vessel is engaged in commerce;

(e) "United States" means the States, the District of Columbia, the Commonwealth of Puerto Rico, the Canal Zone, Guam, American Samoa, the Virgin Islands, and the Trust Territory of the Pacific Islands;

(f) "Person" includes an individual, firm, corporation, association, and a partnership;

(g) "Contiguous zone" means the entire zone established or to be established by the United States under article 24 of the Convention on the Territorial Sea and the Contiguous Zone;

(h) "Onshore facility" means any facility (including, but not limited to motor vehicles and rolling stock) of any kind located in, on, or under, any land within the United States other than submerged land;

(i) "Offshore facility" means any facility of any kind located in, on, or under, any of the navigable waters of the United States other than a vessel or public vessel;

(j) "Applicable water quality standards" means water quality standards adopted pursuant to section 10(c) of the Federal Act and State-adopted water quality standards for waters which are not interstate within the meaning of that Act.

(k) "Federal Act" means the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1151, et seq.

(l) "Sheen" means an iridescent appearance on the surface of water.

(m) "Sludge" means an aggregate of oil or oil and other matter of any kind

in any form other than dredged spoil having a combined specific gravity equivalent to or greater than water.

§ 110.2 Applicability.

The regulations of this part apply to the discharge of oil into or upon the navigable waters of the United States, adjoining shorelines or into or upon the waters of the contiguous zone, prohibited by section 11(b) of the Federal Act.

§ 110.3 Discharge into navigable waters harmful.

For purposes of section 11(b) of the Federal Act, discharges of such quantities of oil into or upon the navigable waters of the United States or adjoining shorelines determined to be harmful to the public health or welfare of the United States, at all times and locations and under all circumstances and conditions, except as provided in section 110.6 of this part, include discharges which:

(a) Violate applicable water quality standards, or

(b) Cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

§ 110.4 Discharge into contiguous zone harmful.

For purposes of section 11(b) of the Federal Act, discharges of such quantities of oil into or upon the waters of the contiguous zone determined to be harmful to the public health or welfare of the United States, at all times and locations and under all circumstances and conditions, except as provided in section 110.6 of this part, include discharges which:

(a) Violate applicable water quality standards in navigable waters of the United States, or

(b) Cause a film or sheen upon or discoloration of the surface of the water or adjoining shorelines or cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines.

§ 110.5 Discharge prohibited.

As provided in section 11(b) (2) of the Federal Act, no person shall discharge or cause or permit to be discharged into or upon the navigable waters of the United States, adjoining shorelines, or into or upon the waters of the contiguous zone any oil, in harmful quantities as determined in §§ 110.3 and 110.4 of this part, except as the same may be permitted in the contiguous zone under Article IV of the International Convention for the Prevention of Pollution of the Sea by Oil, 1954, as amended.

§ 110.6 Exception for vessel engines.

For purposes of section 11(b) of the Federal Act, discharges of oil from a properly functioning vessel engine are not deemed to be harmful; but such oil accumulated in a vessel's bilges shall not be so exempt.

§ 110.7 Dispersants.

Addition of dispersants or emulsifiers to oil to be discharged which would cir-

cumvent the provisions of this part is prohibited.

§ 110.8 Demonstration projects.

Notwithstanding any other provisions of this part, the Administrator of the Environmental Protection Agency may permit the discharge of oil into or upon the navigable waters of the United States, adjoining shorelines, or into or upon the waters of the contiguous zone, in connection with research, demonstration projects, or studies relating to the prevention, control, or abatement of oil pollution.

§ 110.9 Notice.

Any person in charge of any vessel or onshore or offshore facility shall, as soon as he has knowledge of any discharge of oil from such vessel or facility in violation of § 110.5 of this part, immediately notify the U.S. Coast Guard of such discharge in accordance with such procedures as the Secretary of Transportation may prescribe.

PART 115—STATE CERTIFICATION OF ACTIVITIES REQUIRING A FEDERAL LICENSE OR PERMIT

Subpart A—General

- Sec.
- 115.1 Definitions.
- 115.2 Contents of certification.
- 115.3 Contents of application.

Subpart B—Determination of Effect on Other States

- 115.11 Copies of documents.
- 115.12 Supplemental information.
- 115.13 Review by Regional Administrator and notification.
- 115.14 Forwarding to affected State.
- 115.15 Hearings on objection of affected State.
- 115.16 Waiver.

Subpart C—Certification by the Administrator

- 115.21 When Administrator certifies.
- 115.22 Applications.
- 115.23 Notice of hearing.
- 115.24 Certification.
- 115.25 Adoption of new water quality standards.
- 115.26 Inspection of facility or activity before operation.
- 115.27 Notification to licensing or permitting agency.
- 115.28 Termination of suspension.

Subpart D—Consultations

- 115.30 Review and advice.

AUTHORITY: The provisions of this Part 115 issued under secs. 21 (b) and (c), 84 Stat. 91; 33 U.S.C. 1171(b) (1970). Reorganization Plan No. 3 of 1970.

Subpart A—General

§ 115.1 Definitions.

As used in this part, the following terms shall have the meanings indicated below:

(a) "License or permit" means any license or permit granted by an agency of the Federal Government to conduct any activity which may result in any discharge into the navigable waters of the United States.

(b) "Licensing or permitting agency" means any agency of the Federal Government to which application is made for a license or permit.

(c) "Administrator" means the Administrator, Environmental Protection Agency.

(d) "Regional Administrator" means the Regional designee appointed by the Administrator, Environmental Protection Agency.

(e) "Certifying Agency" means the person or agency designated by the Governor of a State, by statute, or by other governmental act, to certify compliance with applicable water quality standards. If an interstate agency has sole authority to so certify for the area within its jurisdiction, such interstate agency shall be the certifying agency. Where a State agency and an interstate agency have concurrent authority to certify, the State agency shall be the certifying agency. Where water quality standards have been promulgated by the Administrator pursuant to section 10(c)(2) of the Act, or where no State or interstate agency has authority to certify, the Administrator shall be the certifying agency.

(f) "Act" means the Federal Water Pollution Control Act, 33 U.S.C. 1151, et seq.

(g) "Water Quality Standards" means standards established pursuant to section 10(c) of the Act, and State-adopted water quality standards for navigable waters which are not interstate waters.

§ 115.2 Contents of certification.

(a) A certification made by a certifying agency shall include the following:

(1) The name and address of the applicant;

(2) A statement that the certifying agency has either (i) examined the application made by the applicant to the licensing or permitting agency (specifically identifying the number or code affixed to such application) and bases its certification upon an evaluation of the information contained in such application which is relevant to water quality considerations, or (ii) examined other information furnished by the applicant sufficient to permit the certifying agency to make the statement described in subparagraph (3) of this paragraph;

(3) A statement that there is a reasonable assurance that the activity will be conducted in a manner which will not violate applicable water quality standards;

(4) A statement of any conditions which the certifying agency deems necessary or desirable with respect to the discharge or the activity; and

(5) Such other information as the certifying agency may determine to be appropriate.

(b) The certifying agency may modify the certification in such manner as may be agreed upon by the certifying agency, the licensing or permitting agency, and the Regional Administrator.

§ 115.3 Contents of application.

A licensing or permitting agency shall require an applicant for a license or per-

mit to include in the form of application such information relating to water quality considerations as may be agreed upon by the licensing or permitting agency and the Administrator.

Subpart B—Determination of Effect on Other States

§ 115.11 Copies of documents.

(a) Upon receipt from an applicant of an application for a license or permit without an accompanying certification, the licensing or permitting agency shall either (1) forward one copy of the application to the appropriate certifying agency and two copies to the Regional Administrator, or (2) forward three copies of the application to the Regional Administrator, pursuant to an agreement between the licensing or permitting agency and the Administrator that the Regional Administrator will transmit a copy of the application to the appropriate certifying agency. Upon subsequent receipt from an applicant of a certification, the licensing or permitting agency shall forward a copy of such certification to the Regional Administrator, unless such certification shall have been made by the Regional Administrator pursuant to § 115.24.

(b) Upon receipt from an applicant of an application for a license or permit with an accompanying certification, the licensing or permitting agency shall forward two copies of the application and certification to the Regional Administrator.

(c) Only those portions of the application which relate to water quality considerations shall be forwarded to the Regional Administrator.

§ 115.12 Supplemental information.

If the documents forwarded to the Regional Administrator by the licensing or permitting agency pursuant to § 115.11 do not contain sufficient information for the Regional Administrator to make the determination provided for in § 115.13, the Regional Administrator may request, and the licensing or permitting agency shall obtain from the applicant and forward to the Regional Administrator, any supplemental information as may be required to make such determination.

§ 115.13 Review by Regional Administrator and notification.

The Regional Administrator shall review the application, certification, and any supplemental information provided in accordance with §§ 115.11 and 115.12 and if the Regional Administrator determines there is reason to believe that a discharge may affect the quality of the waters of any State or States other than the State in which the discharge originates, the Regional Administrator shall, no later than 30 days of the date of receipt of the application and certification from the licensing or permitting agency as provided in § 115.11, so notify each affected State, the licensing or permitting agency, and the applicant.

§ 115.14 Forwarding to affected State.

The Regional Administrator shall forward to each affected State a copy of the material provided in accordance with § 115.11.

§ 115.15 Hearings on objection of affected State.

When a licensing or permitting agency holds a public hearing on the objection of an affected State, notice of such objection, including the grounds for such objection, shall be forwarded to the Regional Administrator by the licensing or permitting agency no later than 30 days prior to such hearing. The Regional Administrator shall at such hearing submit his evaluation with respect to such objection and his recommendations as to whether and under what conditions the license or permit should be issued.

§ 115.16 Waiver.

The certification requirement with respect to an application for a license or permit shall be waived upon:

(a) Written notification from the State or interstate agency concerned that it expressly waives its authority to act on a request for certification; or

(b) Written notification from the licensing or permitting agency to the Regional Administrator of the failure of the State or interstate agency concerned to act on such request for certification within a reasonable period of time after receipt of such request, as determined by the licensing or permitting agency (which period shall generally be considered to be 6 months, but in any event shall not exceed 1 year).

In the event of a waiver hereunder, the Regional Administrator shall consider such waiver as a substitute for a certification, and as appropriate, shall conduct the review, provide the notices, and perform the other functions identified in sections 115.13, 115.14, and 115.15. The notices required by section 115.13 shall be provided not later than 30 days after the date of receipt by the Regional Administrator of either notification referred to herein.

Subpart C—Certification by the Administrator

§ 115.21 When Administrator certifies.

Certification by the Administrator that the discharge resulting from an activity requiring a license or permit will not violate applicable water quality standards will be required where:

(a) Standards have been promulgated, in whole or in part, by the Administrator pursuant to section 10(c)(2) of the Act: *Provided, however,* That the Administrator will certify compliance only with respect to those water quality standards promulgated by him; or

(b) Water quality standards have been established, but no State or interstate agency has authority to give such a certification.

§ 115.22 Applications.

An applicant for certification from the Administrator shall submit to the Regional Administrator a complete description of the discharge involved in the activity for which certification is sought, with a request for certification signed by the applicant. Such description shall include the following:

(a) The name and address of the applicant;

(b) A description of the facility or activity, and of any discharge into navigable waters which may result from the conduct of any activity including, but not limited to, the construction or operation of the facility, including the biological, chemical, thermal, and other characteristics of the discharge, and the location or locations at which such discharge may enter navigable waters;

(c) A description of the function and operation of equipment or facilities to treat wastes or other effluents which may be discharged, including specification of the degree of treatment expected to be attained;

(d) The date or dates on which the activity will begin and end, if known, and the date or dates on which the discharge will take place;

(e) A description of the methods and means being used or proposed to monitor the quality and characteristics of the discharge and the operation of equipment or facilities employed in the treatment or control of wastes or other effluents.

§ 115.23 Notice and hearing.

The Regional Administrator will provide public notice of each request for certification by mailing to State, County, and municipal authorities, heads of State agencies responsible for water quality improvement, and other parties known to be interested in the matter, including adjacent property owners and conservation organizations, or may provide such notice in a newspaper of general circulation in the area in which the activity is proposed to be conducted if the Regional Administrator deems mailed notice to be impracticable. Interested parties shall be provided an opportunity to comment on such request in such manner as the Regional Administrator deems appropriate. All interested and affected parties will be given reasonable opportunity to present evidence and testimony at a public hearing on the question whether to grant or deny certification if the Regional Administrator determines that such a hearing is necessary or appropriate.

§ 115.24 Certification.

If, after considering the complete description, the record of a hearing, if any, held pursuant to § 115.23, and such other information and data as the Regional Administrator deems relevant, the Regional Administrator determines that there is reasonable assurance that the proposed activity will not result in a violation of applicable water quality standards, he shall so certify. If the Regional Administrator determines that no water quality standards are appli-

cable to the waters which might be affected by the proposed activity, he shall so notify the applicant and the licensing or permitting agency in writing and shall provide the licensing or permitting agency with advice, suggestions, and recommendations with respect to conditions to be incorporated in any license or permit to achieve compliance with the purpose of this Act. In such case, no certification shall be required.

§ 115.25 Adoption of new water quality standards.

(a) In any case where:

(1) A license or permit was issued without certification due to the absence of applicable water quality standards; and

(2) Water quality standards applicable to the waters into which the licensed or permitted activity may discharge are subsequently established; and

(3) The Administrator is the certifying agency because:

(i) No State or interstate agency has authority to certify; or

(ii) Such new standards were promulgated by the Administrator pursuant to section 10(c)(2) of the Act; and

(4) The Regional Administrator determines that such uncertified activity is violating water quality standards;

Then the Regional Administrator shall notify the licensee or permittee of such violation, including his recommendations as to actions necessary for compliance. If the licensee or permittee fails within 6 months of the date of such notice to take action which in the opinion of the Regional Administrator will result in compliance with applicable water quality standards, the Regional Administrator shall notify the licensing or permitting agency that the licensee or permittee has failed, after reasonable notice, to comply with such standards and that suspension of the applicable license or permit is required by section 21(b)(9)(B) of the Act.

(b) Where a license or permit is suspended pursuant to paragraph (a) of this section, and where the licensee or permittee subsequently takes action which in the Regional Administrator's opinion will result in compliance with applicable water quality standards, the Regional Administrator shall then notify the licensing or permitting agency that there is reasonable assurance that the licensed or permitted activity will comply with applicable water quality standards.

§ 115.26 Inspection of facility or activity before operation.

Where any facility or activity has received certification pursuant to § 115.24 in connection with the issuance of a license or permit for construction, and where such facility or activity is not required to obtain an operating license or permit, the Regional Administrator or his representative, prior to the initial operation of such facility or activity, shall be afforded the opportunity to in-

spect such facility or activity for the purpose of determining if the manner in which such facility or activity will be operated or conducted will violate applicable water quality standards.

§ 115.27 Notification to licensing or permitting agency.

If the Regional Administrator, after an inspection pursuant to § 115.26, determines that operation of the proposed facility or activity will violate applicable water quality standards, he shall so notify the applicant and the licensing or permitting agency, including his recommendations as to remedial measures necessary to bring the operation of the proposed facility into compliance with such standards.

§ 115.28 Termination of suspension.

Where a licensing or permitting agency, following a public hearing, suspends a license or permit after receiving the Regional Administrator's notice and recommendation pursuant to § 115.27, the applicant may submit evidence to the Regional Administrator that the facility or activity or the operation or conduct thereof has been modified so as not to violate water quality standards. If the Regional Administrator determines that water quality standards will not be violated, he shall so notify the licensing or permitting agency.

Subpart D—Consultations

§ 115.30 Review and advice.

The Regional Administrator may, and upon request shall, provide licensing and permitting agencies with determinations, definitions and interpretations with respect to the meaning and content of water quality standards where they have been federally approved under section 10 of the Act, and findings with respect to the application of all applicable water quality standards in particular cases and in specific circumstances relative to an activity for which a license or permit is sought. The Regional Administrator may, and upon request shall, also advise licensing and permitting agencies as to the status of compliance by dischargers with the conditions and requirements of applicable water quality standards. In cases where an activity for which a license or permit is sought will affect water quality, but for which there are no applicable water quality standards, the Regional Administrator may advise licensing or permitting agencies with respect to conditions of such license or permit to achieve compliance with the purpose of the Act.

PART 120—WATER QUALITY STANDARDS

Sec.	
120.1	Scope and purpose.
120.2	State adoption.
120.3	Availability.
120.10	Standards adopted.
120.11	Iowa water quality standards.

AUTHORITY: The provisions of this Part 120 issued under sec. 1, 70 Stat. 506, as amended; 33 U.S.C. 1160(e), unless otherwise noted.

§ 120.1 Scope and purpose.

This part applies to procedures for the adoption of water quality standards pursuant to section 10(c) of the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1160(c), hereinafter the Federal Act, and identifies and describes those State-adopted water quality standards which the Administrator of the Environmental Protection Agency, hereinafter the Administrator, has determined meet the criteria of the Federal Act.

§ 120.2 State adoption.

(a) Water quality standards consisting of water quality criteria and a plan for the enforcement and implementation of such criteria, if adopted by a State after notice and public hearing, and if determined by the Administrator to be such standards as will protect the public health or welfare, enhance the quality of water and serve the purposes of the Federal Act, shall thereafter be the water quality standards applicable to the interstate waters or portions thereof for which adopted.

(b) Determination by the Administrator that State-adopted water quality standards meet the criteria of paragraph (a) of this section shall be published in the Federal Register. Documents containing such standards shall be incorporated by reference into this part.

§ 120.3 Availability.

State-adopted water quality standards which the Administrator has determined meet the criteria of § 120.2 shall be available for inspection at the Regional Offices of the Environmental Protection Agency and at its Washington, D.C., address at Waterside Mall, Washington, D.C. 20460, where the official historic file of water quality standards shall be maintained.

§ 120.10 Standards adopted.

Water quality standards consisting of water quality criteria and plans of enforcement and implementation thereof which the Administrator has determined meet the criteria of section 10(c) of the Federal Act, except as otherwise noted, have been established by the States as follows:

ALABAMA

Water quality standards established by Alabama on May 5, 1967, for interstate waters subject to its jurisdiction, and which are contained in the document entitled, "Water Quality Standards for Waters of Alabama and a Plan of Implementation, June 1967," except for temperature and dissolved oxygen criteria for those interstate waters for which shellfish harvesting, and fish and wildlife propagation are the established uses, together with appendixes and supporting documents; as amended.

ALASKA

Water quality standards established by Alaska on June 29, 1967, for interstate waters subject to its jurisdiction, and which are contained in the document entitled "Water Quality Standards for Interstate Waters Within the State of Alaska and a Plan for Implementation and Enforcement of the Criteria, June 29, 1967," as amended by

"Water Quality Standards for Interstate Waters Within the State of Alaska, revised November 10, 1967," except for items 8 and 9 entitled "Sediment" and "Toxic Or Other Deleterious Substances, Pesticides and Related Organic and Inorganic Materials."

ARIZONA

Water quality standards established by Arizona on July 18, 1968, for interstate waters subject to its jurisdiction and which are contained in the document entitled "Water Quality Standards for Surface Waters in Arizona," together with supporting material.

ARKANSAS

Water quality standards established by Arkansas on May 26, 1967, for interstate waters subject to its jurisdiction, and which are contained in the document entitled, "Water Quality Criteria and Plan of Implementation of the State of Arkansas, Arkansas Pollution Control Commission," consisting of one volume with six sections, section IV thereof containing criteria for interstate streams, which criteria are identified as "Regulation No. 2 of the Arkansas Pollution Control Commission," and section V thereof containing the "Implementation and Enforcement Plan," together with appendixes and supporting documents; as amended.

CALIFORNIA

Water quality standards established by California in June 1967 for interstate waters subject to its jurisdiction and which are contained in the following documents:

1. Water Quality Control Policy for Klamath River in California, 1967.
2. Water Quality Control Policy for Smith River, 1967.
3. Water Quality Control Policy for Humboldt Bay, 1967.
4. Water Quality Control Policy for Humboldt-Del Norte Coast, 1967.
5. Water Quality Control Policy for Sonoma-Marine Coast, 1967.
6. Water Quality Control Policy for Mendocino Coast, 1967.
7. Lake Tahoe, Water Quality Control Policy, June 1966.
8. Water Quality Control Policy for East Walker River, 1967.
9. Water Quality Control Policy for West Fork Carson River, 1967.
10. Water Quality Control Policy for Truckee River, 1967.
11. Water Quality Control Policy for West Walker River and Lake Topaz, 1967.
12. Water Quality Control Policy for East Fork Carson River, 1967.
13. Statement of Policy for Water Quality Control of Minor California, Nevada Interstate Waters, April 1967.
14. Water Quality Control Policy for Pacific Ocean, 1967.
15. Water Quality Control Policy for San Diego Bay, 1966.
16. Water Quality Control Policy for Mission Bay Including Tidal Prism of San Diego River and Agua Hedionda Lagoon, 1967.
17. Water Quality Control Policy for Tijuana River Basin in California, 1967.
18. Water Quality Control Policy for Sacramento-San Joaquin Delta, 1967.
19. Water Quality Control Policy for Goose Lake, Calif., January 1967.
20. Water Quality Control Policy for Tidal Waters Inland from the Golden Gate within the San Francisco Bay Region, 1967.
21. Water Quality Control Policy for Pacific Ocean, Pescadero Point to Mouth of Tomales Bay (Bolinas Lagoon, Drakes Estero, Limantour Estero, Portions of Tomales Bay and Tidal Portions of Coastal Streams), 1967.
22. Water Quality Control Policy for Coastal Waters, Point Piedras Blancas to Pescadero Point, 1967.

23. Water Quality Control Policy for Coastal Waters, Point Arguello to Point Piedras Blancas, 1967.

24. Water Quality Control Policy for Coastal Waters, Rincon Point to Point Arguello, 1967.

25. Water Quality Control Policy for Pacific Ocean Coastal Waters, Rincon Point to San Gabriel River, 1967.

26. Water Quality Control Policy for San Gabriel River Tidal Prism, 1967.

27. Water Quality Control Policy for Pacific Ocean Coastal Waters, 1967.

28. Water Quality Control Policy for Coastal Bays, Marinas & Sloughs, 1967.

29. Water Quality Control Policy for Colorado River in California, 1967.

30. Water Quality Control Policy for Alamo River in California, 1967.

31. Water Quality Control Policy for New River in California, 1967.

as amended, together with supporting material; except for temperature criteria and the minimum limit of the dissolved oxygen criteria for the near shore coastal waters of the Santa Ana Region.

COLORADO

Water quality standards established in Colorado on June 12, 1967, for interstate waters subject to its jurisdiction and which are contained in the document entitled "Stream Classification for Surface Waters of Colorado, Including: Stream Quality Standards, Plan of Implementation, Enforcement Procedures," as amended; except for dissolved oxygen and temperature criteria for the Animas River below Durango and temperature-change limits for waters classified as "B-1" and "B-2".

CONNECTICUT

Water quality standards established by Connecticut on June 19, 1967, for interstate waters subject to its jurisdiction, and which are contained in the document entitled "Water Quality Standards, State of Connecticut, Submitted to the Secretary of the Interior by the Water Resources Commission, State of Connecticut, June 28, 1967," except for the dissolved oxygen criteria for waters with a use designation of "Protection of Fish, Shellfish and Wildlife" in waters classified as "C," "CC," "SC," and "SCC"; as amended.

DELAWARE

Water quality standards established by Delaware on May 17, 1967, for interstate waters subject to its jurisdiction, and which are contained in the document entitled "Water Quality Standards For Interstate Streams, June 1967," as amended; except for treatment requirements for Delaware City and Milton, and except for dissolved oxygen criteria of 50 percent saturation where so designated for fresh waters.

DELAWARE RIVER BASIN COMMISSION

Water quality standards established by the Delaware River Basin Commission on June 23, 1967, for interstate waters subject to its jurisdiction, and which are contained in the document entitled "Water Quality Standards (as authorized by Resolution No. 67-9), June 23, 1967," together with appendixes and supporting documents, as amended; except for dissolved oxygen and temperature criteria for interstate waters classified for trout maintenance; and except for the Delaware River from the point designated R.M. 95.0 to the Philadelphia-Delaware County line.

DISTRICT OF COLUMBIA

Water quality standards established by the District of Columbia on June 29, 1967, for interstate waters subject to its jurisdiction, and which are contained in the document

entitled "Water Quality Criteria, Implementation And Enforcement Plan, Potomac River And Tributaries, June 1967," as amended; except for temperature and dissolved oxygen criteria.

An addendum to the water quality standards established by the District of Columbia which was adopted on December 16, 1968, by Commissioners' Order No. 68-801 and which is entitled "Revised Water Criteria and Uses (1972)".

FLORIDA

Water quality standards established by Florida on February 20, 1968, for interstate waters subject to its jurisdiction and which are contained in the document entitled, "Rules of the Florida Air and Water Pollution Control Commission, Chapter 28-5, Pollution of Waters", as amended.

GEORGIA

Water quality standards established by Georgia in June 1967, for interstate waters subject to its jurisdiction, and which are contained in the documents entitled "Establishment of Water Quality Standards and Classifications For Interstate Waters in the State of Georgia In Compliance With the Federal Water Pollution Control Act, As Amended by the Water Quality Act of 1965—Section 10(c)(1), Under Authority of the Georgia Water Quality Control Act, Act 870, As Amended Through 1966," consisting of 11 sections, including criteria contained in "Rules of State, Water Quality Control Board, Chapter 730-3, Water Use Classifications and Water Quality Standards" adopted by the State Water Quality Control Board on April 21, 1967, and contained in section 1 of the aforesaid 11 sections, together with appendixes and supporting documents.

TERRITORY OF GUAM

Water quality standards established by the Territory of Guam on December 18, 1967, for interstate waters subject to its jurisdiction and which are contained in the document entitled "Standards of Water Quality for Waters of the Territory of Guam, December, 1967", and which were revised on April 15, 1968, and which are contained as revised, in the document entitled "Standards of Water Quality for Waters of the Territory of Guam, April, 1968".

HAWAII

Water quality standards established by Hawaii on June 29, 1967, for interstate waters subject to its jurisdiction, and which are contained in the document entitled "Water Quality Standards, June 29, 1967," and which were revised on December 26, 1967, by revisions of Chapters 37 and 37-A of the Public Health Regulations, and as otherwise amended.

IDAHO

Water quality standards established by Idaho in June 1967, for interstate waters subject to its jurisdiction, and which are contained in the documents entitled "Rules And Regulations For Standards of Water Quality For The Interstate Waters Of Idaho And Disposal Therein Of Sewage And Industrial Wastes," and "Implementation, Enforcement And Surveillance Plan For The Interstate Waters of Idaho," together with appendixes and supporting documents, as amended.

ILLINOIS

Water quality standards established by Illinois for interstate waters subject to its jurisdiction and which are contained in the following documents:

1. "Rules and Regulations SWB-7, Water Quality Criteria, Interstate Waters Lake

Michigan and Little Calumet River, Grand Calumet River and Wolf Lake," together with appendixes and supporting documents, dated September 6, 1966, and September 28, 1967, as amended;

2. "Rules and Regulations SWB-11, Water Quality Criteria, Interstate Waters Rock River, Fox River, Des Plaines River, Kankakee River and Certain Named Interstate Tributaries, Criteria—December 1, 1966, Implementation—August 25, 1967," together with appendixes and supporting documents, dated December 1, 1966, and August 25, 1967, as amended; except for dissolved oxygen and temperature criteria for interstate waters classified for fish and aquatic life;

3. "Rules and Regulations SWB-15, Water Quality Criteria, Chicago River and Calumet River Systems, June 28, 1967," together with appendixes and supporting documents, dated June 28, 1967, as amended; except for dissolved oxygen and temperature criteria for interstate waters classified for fish and aquatic life;

4. "Rules and Regulations SWB-8, Water Quality Criteria, Interstate Waters Illinois River and Lower Section of Des Plaines River, Criteria—December 1, 1966, Implementation—August 11, 1967," together with appendixes and supporting documents, dated December 1, 1966, and August 11, 1967, as amended; except for dissolved oxygen and temperature criteria for interstate waters classified for fish and aquatic life.

INDIANA

Water quality standards established by Indiana in June 1967, for interstate waters subject to its jurisdiction, and which are contained in the following documents:

1. "Report On Water Quality Criteria And Plan Of Implementation, Whitewater River Basin, June 1967," as amended.
2. "Report On Water Quality Criteria And Plan Of Implementation, St. Joseph River Basin, June 1967," as amended.
3. "Report On Water Quality Criteria And Plan Of Implementation, Maumee River Basin, June 1967," as amended.
4. "Report On Water Quality And Plan Of Implementation, Upper And Middle Wabash River Basins (Down to Terre Haute), June 1967," as amended.
5. "Report On Water Quality And Plan Of Implementation, Patoka River Basin And The Indiana Waters Of The Lower Wabash River Basin Excluding The Waters Of The White River Basin, June 1967," as amended.
6. "Report On Water Quality And Plan Of Implementation, The Indiana Waters Of The Main Stem Of The Ohio River And Its Indiana Tributary Basins Excluding The Waters Of The Wabash River Basin, June 1967," as amended.
7. "Report On Water Quality And Plan Of Implementation, Indiana Waters Of The Kankakee River Basin, June 1967," as amended.
8. "Report On Water Quality And Plan Of Implementation, Lake Michigan Basin, June 1967," as amended.

IOWA

Water quality standards established by Iowa on May 26, 1967, for interstate waters subject to its jurisdiction and which are contained in the document entitled "Water Quality Criteria and Plan for Implementation and Enforcement for the Surface Waters of Iowa," as amended; except for any parts thereof which may be in conflict with the provisions of § 120.11.

KANSAS

Water quality standards established by Kansas in June 1967 for interstate waters subject to its jurisdiction and which are contained in documents entitled "River Basin

Water Quality Criteria-Kansas" and "Plan of Implementation for Water Quality Control and Pollution Abatement," as amended; except for the final treatment compliance date of 1985, the bacteriological and temperature criteria for all interstate waters of Kansas, and the dissolved oxygen criterion for the Missouri River.

KENTUCKY

Water quality standards established by Kentucky on May 31, 1967, for interstate waters subject to its jurisdiction and which are contained in the document entitled "Kentucky Water Quality Standards for Interstate Waters," as amended; except for the criteria for the protection of aquatic life.

LOUISIANA

Water quality standards established by Louisiana on June 27, 1967, for interstate waters subject to its jurisdiction, and which are contained in the documents entitled "Louisiana Stream Control Commission, Baton Rouge, Louisiana, Water Quality Criteria for Waters of the State of Louisiana," and "Plan For Implementation and Enforcement of Water Quality Standards, Louisiana Stream Control Commission," together with appendixes and supporting documents, as amended; except for dissolved oxygen criteria for those interstate waters for which a use includes the propagation of aquatic life, and for which the dissolved oxygen criterion is established at "not less than 50 percent of saturation at existing water temperature."

MAINE

Water quality standards established by Maine on July 5, 1967, for interstate waters subject to its jurisdiction, and which are contained in the following documents:

- "Saco River Basin Water Quality Standards";
- "Sagadahoc County Tidal Basin Water Quality Standards";
- "St. Croix River Basin Water Quality Standards";
- "Lincoln County Tidal Basin Water Quality Standards";
- "Androscoggin River Water Quality Standards";
- "Cumberland County Tidal Basin Water Quality Standards";
- "Salmon Falls and Piscataqua River Basin Water Quality Standards";
- "Aroostook River Basin Water Quality Standards";
- "Meduxnekeg River Basin Water Quality Standards";
- "Knox County Tidal Waters Water Quality Standards";
- "York County Tidal Basin Water Quality Standards";
- "Waldo, Penobscot and Hancock County Tidal Waters Water Quality Standards";
- "Washington County Tidal Waters Water Quality Standards";
- "Prestile Stream Water Quality Standards";
- "State of Maine Material for Implementation Plan Common to All Interstate River and Tidal Waters Water Quality Standards"; all of which as amended; and except for Hancock County interstate waters designated as Class SC; and except for pH, temperature and radioactivity criteria for all interstate waters other than those classified as Class "A"; and except for bacteriological criteria for Classes "C", "D", "SC", and "SD"; and except for dissolved oxygen criteria for all fresh waters.

MARYLAND

Water quality standards established by Maryland for interstate waters subject to its jurisdiction and which are contained in the documents entitled, "Water Resources Regulation 4.8, General Water Quality Criteria

and Specific Water Quality Standards for All Maryland Waters," of the Maryland Water Resources Commission, May 22, 1967; and "Maryland's Water Quality Program, Maryland Plan, Binder No. 1," together with appendixes and supporting documents.

MASSACHUSETTS

Water quality standards established by Massachusetts for the interstate waters subject to its jurisdiction and which are contained in the documents entitled:

1. "Volume 1, Water Quality Standards, Laws, Policy and Standards," including "Water Quality Standards" adopted by the Commonwealth of Massachusetts Water Resources Commission, Division of Water Pollution Control, on March 3, 1967;
2. "Volume 2, Water Quality Standards, Blackstone, French and Quinebaug River Basins;
3. "Volume 3, Water Quality Standards, Housatonic and Hoosic River Basins;
4. "Volume 4, Water Quality Standards, Taunton and Ten Mile River Basins;
5. "Volume 5, Water Quality Standards, Nashua River Basin;
6. "Volume 6, Water Quality Standards, Connecticut River Basins;
7. "Volume 7, Water Quality Standards, Merrimack River Basin;
8. "Volume 8, Water Quality Standards, Coastal Waters;" together with appendixes and supporting documents.

MICHIGAN

Water quality standards established by Michigan on June 28, 1967, for interstate waters subject to its jurisdiction, and which are contained in the following documents:

1. "Water Resource Uses, Present and Prospective for the St. Joseph River Basin in Michigan and Water Quality Standards and Plan of Implementation, Revised June 1967";
2. "Water Resource Uses, Present and Prospective for Lake Michigan and Water Quality Standards and Plan of Implementation, Revised June 1967";
3. "Water Resource Uses, Present and Prospective for Lake Huron and Water Quality Standards and Plan of Implementation, Revised June 1967";
4. "Water Resource Uses, Present and Prospective for St. Clair River, Lake St. Clair, Detroit River, Lake Erie, Maumee River Basin and Water Quality Standards and Plan of Implementation, Revised June 1967";
5. "Water Resource Uses, Present and Prospective for Lake Superior and the St. Marys River and Water Quality Standards and Plan of Implementation, Revised June 1967";
6. "Water Resource Uses, Present and Prospective for the Menominee and Montreal River Basins in Michigan and the Other Michigan-Wisconsin Interstate Boundary Waters and Water Quality Standards and Plan of Implementation, Revised June 1967"; as amended; except temperature criteria for waters classified for the protection of fish, wildlife and other aquatic life.

MINNESOTA

Water quality standards established by Minnesota on May 8, 1967, for interstate waters subject to its jurisdiction, and which are contained in the document entitled "Water Quality Standards for the Interstate Waters of Minnesota, June, 1967", as amended; except for the St. Louis River; and except for the criteria of dissolved oxygen of 3 mg/l for interstate waters other than waters which are the subject of recommendations following the conferences on the Red River of the North (September 14-15, 1965) and the Upper Mississippi River (February 7-8, 1964) called pursuant to section 10(d) of the Federal Water Pollution Control Act, as amended;

and except for the maximum temperature limit of 93° F. for July and August.

MISSISSIPPI

Water quality standards established by Mississippi on June 19, 1967, for interstate waters subject to its jurisdiction, and which are contained in the document entitled "Water Quality Standards For Interstate Waters, June 19, 1967," as amended; except for the dissolved oxygen criteria for fresh waters and open ocean waters classified for fish and wildlife or higher uses; and temperature change limits in waters classified for fish and wildlife or higher uses.

MISSOURI

Water quality standards established by Missouri in June 1967, for interstate waters subject to its jurisdiction, and which are contained in the following documents:

1. "St. Francis River, Little River, Lower Mississippi River Basin, Water Quality Standards, June 1967," as amended.
2. "Osage-Marais des Cygnes River, Lake of the Ozarks, Marmaton, and Little Osage Rivers, Missouri River Basin, Water Quality Standards, June 1967," as amended.
3. "Nishnabotna, Tarkio, West Tarkio, Nodaway, Platte, One Hundred And Two, Grand, East Fork Grand, Thompson, Little Weldon, and Chariton Rivers, Missouri River Basin, Water Quality Standards, June 1967," as amended.
4. "White, North Fork White, Spring, Eleven Point, Current and Black Rivers, White River Basin, Southwest Lower Mississippi, Water Quality Standards, June 1967," as amended.
5. "Missouri River, Water Quality Standards, June 1967," as amended; except for dissolved oxygen criteria.
6. "Mississippi River, Water Quality Standards, June 1967," as amended; except for dissolved oxygen criteria for portion below Alton Lock Dam.
7. "Big Blue River, Missouri River Basin, Water Quality Standards, June 1967," as amended.
8. "Des Moines, Fox, Wyaconda, and North Pabst Rivers, Upper Mississippi River Basin, Water Quality Standards, June 1967," as amended.
9. "Spring River, Shoal Creek, and Turkey Creek, Elk River, Buffalo Creek, and Lost Creek, Grand (Neosho) River Basin, Southwest Lower Mississippi, Water Quality Standards, June 1967," as amended.

MONTANA

Water quality standards established by Montana on June 5, 1967, for interstate waters subject to its jurisdiction, and which are contained in the documents entitled "Missouri River Drainage, Water Quality Standards For The Surface Waters Of Montana," and "Columbia River Drainage, Water Quality Standards For The Surface Waters Of Montana," as amended on September 22, 1967, by "Water Quality Standards for the Surface Waters of Montana."

An addendum adopted on October 8, 1968, and made part of the water quality standards established by Montana.

NEBRASKA

Water quality standards established by Nebraska on November 18, 1968, for interstate waters subject to its jurisdiction and which are contained in the document entitled "Information Bulletin for Public Hearings on Proposed Revisions of Water Quality Standards for Interstate and Intrastate Waters of Nebraska, October 1968," as amended.

NEVADA

Water quality standards established by Nevada on June 27, 1967, for interstate waters

subject to its jurisdiction, and which are contained in the documents entitled "Water Pollution Control Regulations (Exhibit 'A') and "Interstate Water Quality Standards and Plan of Implementation, 1967".

NEW HAMPSHIRE

Water quality standards established by New Hampshire on May 24, 1967, for interstate waters subject to its jurisdiction, and which are contained in the document entitled "Report on Water Quality Standards," together with appendixes and supporting documents, as amended; except for treatment time schedules for cities of Manchester, Concord, Rye, Durham, Plymouth, Dover, Portsmouth, and except for temperature criteria for all interstate waters classified as "B" and "C", and except for the Androscoggin River.

NEW JERSEY

Water quality standards established by New Jersey on August 10, 1964, for interstate waters subject to its jurisdiction, and which are contained in the document entitled "New Jersey State Department of Health, Division of Clean Air and Water, Water Pollution Control Program, Stream Classification, Standards of Quality—Implementation," as amended; except dissolved oxygen criteria in interstate waters classified for FW-2, FW-3, TW-1, CW-1, CW-2, and except for temperature criteria for all coastal and tidal waters, except Delaware Bay and Estuary, and except for temperature change limits for trout waters classified FW-2 and FW-3.

NEW MEXICO

Water quality standards established by New Mexico on June 6, 1967, for interstate waters subject to its jurisdiction, and which are contained in the following documents:

- "The Rio Grande River in New Mexico, Water Quality Standards, June 1967";
- "The San Juan, La Plata, and Animas Rivers in New Mexico, Water Quality Standards, June 1967";
- "The Pecos River in New Mexico, Water Quality Standards, June 1967";
- "The Gila and San Francisco Rivers in New Mexico, Water Quality Standards, June 1967";
- "The Canadian River in New Mexico, Water Quality Standards, June 1967";

And a water quality standards plan of enforcement and implementation established on June 20, 1967, which are contained in the document entitled "Implementation and Enforcement Plan for Water Quality Control in New Mexico, June 1967";

And amendments adopted on March 4, 1968, and contained in the document entitled "Amendments to the Water Quality Standards, March 1968".

An addendum adopted on October 9, 1968, and made a part of section 2, page 5 of the document "Implementation and Enforcement Plan for Water Quality Control in New Mexico, June 1967."

And addenda adopted on January 13, 1969, and made part of the water quality standards established by New Mexico.

NEW YORK

Water quality standards established by New York for interstate waters subject to its jurisdiction, and which are contained in the following documents:

1. "Interstate Waters, Classifications, Water Quality Standards and Criteria and Implementation Plan for the Delaware River Drainage Basin, Volume I, November 1966;
2. "Interstate Waters, Classifications, Water Quality Standards and Criteria and Implementation and Enforcement Plan for the Susquehanna River Drainage Basin, Volume II, February 1967;

3. "Interstate Waters Classifications, Water Quality Standards and Criteria and Implementation and Enforcement Plan for the St. Lawrence River Basin, Volume III, May 1967;

4. "Interstate Waters, Classifications, Water Quality Standards and Criteria and Implementation Plan for the Lake Ontario Basin, Volume IV, June 1967;

5. "Interstate Waters, Classifications, Water Quality Standards and Criteria and Implementation and Enforcement Plan for the Hudson River Basin, Volume V, June 1967;

6. "Interstate Waters, Classifications, Water Quality Standards and Criteria and Implementation and Enforcement Plan for the Lake Erie-Niagara River Basin, Volume VI, June 1967;

7. "Interstate Waters, Classifications, Water Quality Standards and Criteria and Implementation and Enforcement Plan for the Allegheny River Basin, Volume VII, June 1967;

8. "Interstate Waters, Classifications, Water Quality Standards and Criteria and Implementation and Enforcement Plan for the Coastal Waters of New York State, Volume VIII, June 1967."

together with all appendixes and attachments thereto, and all of which as amended.

NORTH CAROLINA

Water quality standards established by North Carolina on June 23, 1967, for interstate waters subject to its jurisdiction, and which are contained in the document entitled "Excerpt: North Carolina Water Quality Standards and Plan of Implementation, Interstate and Coastal Waters," as amended; except for dissolved oxygen criteria for fresh waters classified as "A," "B," and "C," and open ocean waters classified as "SA," "SB," "SC," and except for maximum temperature limit of 95° F. and temperature change limits for trout propagation waters and all "S" classes.

NORTH DAKOTA

Water quality standards established by North Dakota on May 16, 1967, for interstate waters subject to its jurisdiction, and which are contained in the document entitled "Water Quality Standards for Surface Waters of North Dakota, Plan for Implementation of Water Quality Standards," together with appendixes and supporting documents, all of which as amended; except for the Red River of the North Drainage Basin.

OHIO

Water quality standards established by Ohio in June 1967, for interstate waters subject to its jurisdiction, and which are contained in the following documents:

1. "Water Quality Standards For Great Miami, Whitewater and Wabash River Basins, June 21, 1967," as amended; except for temperature and dissolved oxygen criteria in waters classified "Aquatic Life A".

2. "Water Quality Standards For Mahoning River, Yankee and Pymatuning Creeks, and Little Beaver Creek, June 20, 1967," as amended; except for the Mahoning River and except for odor criterion for Little Beaver, Yankee, and Pymatuning Creeks, and except for temperature and dissolved oxygen criteria for waters classified "Aquatic Life A".

3. "Water Quality Standards For The Ash-tabula River, Conneaut Creek, and Turkey Creek, Including Interstate Waters of Ohio-Pennsylvania, June 1967," as amended; except for temperature and dissolved oxygen criteria for waters classified "Aquatic Life A".

4. "Water Quality Standards for Interstate Waters of the Ohio River Between Ohio-West Virginia and Ohio-Kentucky, June 26, 1967," as amended; except for temperature and dissolved oxygen criteria for waters classified "Aquatic Life A".

5. "Report on Water Quality Standards For The Maumee River Basin Including Interstate Waters, June 1967," as amended; except for temperature and dissolved oxygen criteria for waters classified "Aquatic Life A".

6. "Report on Water Quality Standards For Interstate Waters Of Lake Erie, May 1967, as amended; except for temperature and dissolved oxygen criteria for waters classified "Aquatic Life A".

OKLAHOMA

Water quality standards established by Oklahoma on October 10, 1967, for interstate waters subject to its jurisdiction, and which are contained in the document entitled "Water Quality Criteria And Stream Standards For Oklahoma, 1967," as amended; except for dissolved oxygen criteria for waters with a use designated "Protection of fish and wildlife propagation, including smallmouth bass fisheries."

OREGON

Water quality standards established by Oregon on June 1, 1967, for interstate waters subject to its jurisdiction, and which are contained in the document entitled "Chapter 334, Oregon Administrative Rules, State Sanitary Authority, Division 1, Water Pollution, Subdivision 1, Standards of Quality for Public Waters of Oregon and Disposal therein of Sewage and Industrial Wastes," together with appendixes and supporting documents, and as amended on May 24, 1968, by a document entitled "Addendum, Adopted May 24, 1968, Implementation and Enforcement Plan for the Public Waters of the State of Oregon, May 1967."

PENNSYLVANIA

Water quality standards established by Pennsylvania on June 28, 1967, for interstate waters subject to its jurisdiction, and which are contained in the document entitled "Water Quality Standards For Pennsylvania's Interstate Streams, June 1967," as amended, including criteria and use classifications contained in Article 301 of the Pennsylvania Sanitary Water Board's rules and regulations.

COMMONWEALTH OF PUERTO RICO

Water quality standards established by Puerto Rico on June 30, 1967, for interstate waters subject to its jurisdiction and which are contained in the document entitled, "Sanitary Rules and Regulations No. 127, To Establish Classifications and Standards for the Coastal Waters of Puerto Rico in accordance with Article 8 of Act No. 142 Approved May 1, 1950, for the Water Pollution Control, as amended, and of Act No. 81 approved March 14, 1912, 'An Act to Reorganize the Sanitary Service', as amended," together with supporting material, as amended by Sanitary Regulation No. 128, adopted December 29, 1967 and further amended by Sanitary Regulation No. 129, adopted December 23, 1968.

RHODE ISLAND

Water quality standards established by Rhode Island on June 27, 1967, for interstate waters subject to its jurisdiction, and which are contained in the document entitled "State of Rhode Island and Providence Plantations, Water Quality Standards for Interstate Waters, June, 1967," together with appendixes and supporting documents, as amended; except for dissolved oxygen criteria for interstate waters classified as Class "C" and Class "SC".

SOUTH CAROLINA

Water quality standards established by South Carolina on November 7, 1967, for interstate waters subject to its jurisdiction and which are contained in the document entitled "General Water Quality Criteria and

Specific Water Quality Standards, Implementation Plan," except for the dissolved oxygen criteria for waters classified as "B," "C," and swamp waters, the temperature-rise criteria for all freshwater classifications and the maximum temperature limit for all freshwater areas except the Savannah, Tugaloo, and Chatoga Rivers.

SOUTH DAKOTA

Water quality standards established by South Dakota on February 18, 1967, for interstate waters subject to its jurisdiction, and which are contained in the document entitled "Water Quality Standards For The Surface Waters Of South Dakota, February 18, 1967," together with appendixes and supporting documents.

TENNESSEE

Water quality standards established by Tennessee on May 26, 1967, for interstate waters subject to its jurisdiction, and which are contained in the document entitled "Water Quality Criteria And Implementation Plan for State of Tennessee," as amended; except for temperature criteria in all interstate waters classified for fish and aquatic life.

TEXAS

Water quality standards established by Texas on June 26, 1967, for interstate waters subject to its jurisdiction, and which are contained in the document entitled "State of Texas, Water Quality Requirements," as amended.

UTAH

Water quality standards established by Utah in June 1967, and amended in November 1968, for interstate waters subject to its jurisdiction and which are contained in the document entitled "Water Quality Standards and Implementation Plan," as amended.

VERMONT

Water quality standards established by Vermont on June 15, 1967, for interstate waters subject to its jurisdiction, and which are contained in the document entitled "Plan for Implementation and Water Quality Criteria (Public Law 89-234) Vermont Water Resources Board, June 1967," as amended; except for lower Connecticut River (Wildier Dam to Massachusetts State line), Walloomsac River, and the segment of Battan Kill classified as "C" (Richville Road Bridge to Tanner Brook); and except for dissolved oxygen criteria for all interstate waters classified for Class "C"; and except for dissolved oxygen and temperature change criteria for interstate waters classified for coldwater fish propagation.

VIRGINIA

Water quality standards established by Virginia for interstate waters subject to its jurisdiction and which are contained in the following documents:

1. "Plan for Management of Water Quality in the Clinch & Powell River Basins in Virginia, Publication No. WQ-4, March 29, 1967," adopted March 29, 1967.

2. "Plan for Management of Water Quality in the Holston River Basin in Virginia, Publication No. WQ-5, March 29, 1967," adopted June 13, 1967.

3. "Plan for Management of Water Quality in the Shenandoah River and its Tributaries from the West Virginia-Virginia State line to the Junction of the North & South Forks, South Fork to Route 619 Bridge, Potomac River Tributaries (Frederick and Clarke Counties) and Interstate Tributaries (Rockingham County) in Virginia, Publication No. WQ-9, June 5, 1967," adopted June 13, 1967.

4. "Plan for Management of Water Quality in the South Fork Shenandoah River in Warren, Page, Rockingham and Augusta Counties in Virginia, June 4, 1968," adopted January 17, 1968.

5. "Plan for Management of Water Quality in the Tributaries of the Potomac River in Prince William, Stafford, King George, Westmoreland and Northumberland Counties in Virginia, Publication No. WQ-12, May 29, 1967," adopted May 29, 1967.

6. "Plan for Management of Water Quality in the Tributaries of the Potomac River in Fairfax County, East of the Western Fairfax-Arlington County Boundary and in Arlington and Prince William Counties, but not including Chopawamsic Creek, Publication No. WQ-13, June 5, 1967," adopted June 13, 1967.

7. "Plan for Management of Water Quality in the New River Basin in Virginia, Publication No. WQ-15, June 5, 1967," adopted June 13, 1967.

8. "Plan for Management of Water Quality in the Dan, Smith, Yadkin and Roanoke River Basins in Virginia, Publication No. WQ-18, June 30, 1967," adopted June 29, 1967.

9. "Plan for Management of Water Quality in the Chowan River Basin in Virginia, Publication No. WQ-20, May 29, 1967," adopted May 29, 1967.

10. "Plan for Management of Water Quality in the Rappahannock River Basin in Virginia, Publication No. WQ-22, May 29, 1967," adopted May 29, 1967.

11. "Plan for Management of Water Quality in the Big Sandy River Basin in Virginia, Publication No. WQ-24, June 5, 1967," adopted June 13, 1967.

12. "Plan for Management of Water Quality in the York River Basin in Virginia, Publication No. WQ-26, May 29, 1967," adopted May 29, 1967.

13. "Plan for Management of Water Quality in the James River Basin in Virginia, Publication No. WQ-30, June 30, 1967," adopted June 22, 1967.

14. "Plan for Management of Water Quality in the Back Bay, North Landing and Northwest Rivers and other Interstate Streams and their Tributaries in Virginia Beach, Chesapeake, and Nansemond County, Virginia, Publication No. WQ-32, June 16, 1967," adopted June 22, 1967.

15. "Plan for Management of Water Quality in the Chesapeake Bay and Atlantic Ocean Drainage Basins in Virginia, Publication No. WQ-34, June 16, 1967," adopted June 22, 1967.

16. "Plan for Management of Water Quality in the Tributaries of the Potomac River in Highland County, Virginia, Publication No. WQ-38, June 5, 1967," adopted June 13, 1967.

as amended, together with supporting documents; except for dissolved oxygen criteria for the open ocean and freshwater streams, the 95° F. maximum temperature limit, the chloride criteria for the North Fork Holston River, and certain parts of the implementation plan.

VIRGIN ISLANDS

Water quality standards established by the Virgin Islands on July 7, 1967, for interstate waters subject to its jurisdiction, and which are contained in the document entitled "Report On Water Quality Criteria And Plan Of Implementation, Virgin Islands, United States Of America, July 1967," as amended by "Report On Water Quality Criteria And Plan Of Implementation, Virgin Islands, United States Of America, August 25, 1967."

WASHINGTON

Water quality standards established by Washington on June 29, 1967, for interstate waters subject to its jurisdiction, and which are contained in the documents entitled "A

Regulation Relating to Water Quality Standards for Interstate and Coastal Waters of the State of Washington and A Plan For Implementation and Enforcement of Such Standards Promulgated June 29, 1967," and "Implementation and Enforcement Plan for Interstate and Coastal Waters, June 1967," as amended by "A Regulation Relating To Water Quality Standards For Interstate and Coastal Waters of the State of Washington and a Plan For Implementation and Enforcement of Such Standards, December 4, 1967" and "Implementation and Enforcement Plan for Interstate and Coastal Waters, December 1967," together with appendixes and supporting documents.

WEST VIRGINIA

Water quality standards established by West Virginia on January 26, 1967, for interstate waters subject to its jurisdiction and which are contained in the document entitled "Report On Water Quality Criteria And Plan Of Implementation, Interstate Streams Of West Virginia," as amended; except for iron and aluminum criteria for interstate waters classified under Section 5.03 (a) of State Regulations.

WISCONSIN

Water quality standards established by Wisconsin on April 26, 1967, for interstate waters subject to its jurisdiction, and which are contained in the document entitled "Water Quality Standards For Interstate Waters With Report On Implementation And Enforcement, June 1967," including Wisconsin Administrative Code Sections RD 2.01, RD 2.02, RD 2.03, RD 3.01 through RD 3.09, together with appendixes and supporting documents.

WYOMING

Water quality standards established by Wyoming on October 28, 1968, for interstate waters subject to its jurisdiction and which are contained in the document, "Water Quality Standards For Interstate Waters in Wyoming," together with supporting documents.

§ 120.11 Iowa water quality standards.

(a) *Waters.* The water quality standards of this section are applicable to the interstate waters located in the State of Iowa, of the Mississippi River, Missouri River, Fox River, Des Moines River, East Fork of the Des Moines River, West Fork of the Des Moines River, Iowa River, Cedar River, Shellrock River, Winnebago River, Wapsipinicon River, Upper Iowa River, Chariton River, Middle Fork Medicine River, Weldon River, Little River, Thompson River, East Fork of the Big River, Grand River, Platte River, East Fork of the 102 River, Middle Fork of the 102 River, Nodaway River, West Tarkio River, Tarkio River, Nishnabotna River, Little Sioux River, Big Sioux River, Rock River, and Kanaranzi Ditch.

(b) *Dilution.* Dilution shall not be considered a substitute for proper waste treatment at any time.

(c) *Temperature.* Heat additions from manmade sources in all interstate waters, except the Mississippi River and Missouri River, shall not raise the mean daily temperature more than 5° F. and shall not exceed a maximum temperature for each individual water body such as is necessary to protect the production of locally occurring desirable fish populations and their associated biota, and in any case shall not exceed at any time a maximum temperature of 90° F.

(d) *Phenols.* Concentrations of phenols from other than natural sources shall not exceed one part per billion (0.001 mg/l).

(e) *Public water supply.* Waters designated as a source of public water supply shall be of such quality that USPHS Drinking Water Standards for finished water can be met after conventional water treatment, consisting of coagulation, sedimentation, rapid sand filtration and disinfection.

(f) *Treatment.* All municipal wastes discharged into the interstate waters of the Mississippi River and the Missouri River shall receive a minimum of secondary treatment to achieve a ninety percent (90%) reduction of BOD prior to discharge no later than December 31, 1973. All industrial wastes discharged into such interstate waters shall receive equivalent treatment prior to discharge no later than December 31, 1973.

(g) *Disinfection.* Continuous disinfection shall be provided for all municipal waste treatment effluents and for all other wastes which may be sources of bacterial pollution throughout the year where such wastes are discharged into interstate waters designated for public water supplies, and throughout the recreational season (April 1 to October 31) where such wastes are discharged into interstate waters used or classified for recreational use, and at all other times as necessary to prevent bacterial pollution which may endanger the public health or welfare.

(Sec. 10(e)(2), as amended, 79 Stat. 908; 33 U.S.C. 1160(c)(2))

PART 122—REVISION OF WATER QUALITY STANDARDS

Sec.	
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122.2	Definitions.
122.3	General provisions.
122.4	Initiation of proceeding by State which adopted standards to be revised.
122.5	Initiation of proceedings for revision by the Administrator.
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122.7	Notice of conference.
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122.9	Parties.
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122.11	Presentation of material.
122.12	Conference procedure.
122.13	Record of proceedings.
122.14	Preparation, publication, and promulgation of water quality standards.

AUTHORITY: The provisions of this Part 122 issued under section 10, 79 Stat. 509, as amended; 33 U.S.C. 1160. Interpret or apply section 10(c), 79 Stat. 908, 33 U.S.C. 1160(c).

§ 122.1 Applicability.

The provisions of this part apply to revisions of water quality standards under section 10(c) of the Federal Water Pollution Control Act, as amended (33 U.S.C. 1160(c)).

§ 122.2 Definitions.

(a) "Act" means the Federal Water Pollution Control Act, as amended (33 U.S.C. 1151 et seq.).

(b) "Chairman" means the Chairman designated as stated in § 122.10(a) to conduct the conference pursuant to section 10(c)(2) of the Act.

(c) "Agency" means the Environmental Protection Agency (EPA).

(d) "Administrator" means the Administrator of EPA.

(e) "Water quality standards" mean water quality criteria applicable to specific interstate waters and plans for the implementation and enforcement of such criteria, established pursuant to Part 120 of this chapter, and as revised from time to time pursuant to this part.

(f) The definitions of terms contained in subsection 10(j) and section 23 of the Act shall be applicable to such terms as used in this part unless the context otherwise requires.

§ 122.3 General provisions.

(a) The Governor of any State which has adopted water quality standards, or the Governor of any State affected by another State's water quality standards, or the Administrator, may seek to revise such standards from time to time as provided in this part.

(b) Unless and until a revision to water quality standards has been finally promulgated or approved by the Administrator and has become effective in accordance with this part, every aspect of the water quality standards, including water quality criteria and plans for implementation and enforcement, as in effect prior to such revision shall continue in effect and shall be the enforceable water quality standards for purposes of the Act. Except as provided in this part, water quality standards, including water quality criteria and plans for implementation and enforcement, may not be revised, modified or altered in any respect.

§ 122.4 Initiation of proceeding by State which adopted standards to be revised.

(a) A State may, after notice and public hearing, adopt revisions of its own water quality standards, including revisions of water quality criteria and revisions of plans for the enforcement and implementation of such criteria. Such revisions shall be valid and enforceable if they are determined by the Administrator to be such revisions as will protect the public health or welfare, enhance the quality of water and serve the purposes of the Act, and the water quality standards of the State as so revised shall thereafter be the water quality standards applicable to the interstate waters or portions thereof for which adopted.

(b) Determination by the Administrator that State-adopted revisions to water quality standards meet the criteria of paragraph (a) of this section shall be published in the FEDERAL REGISTER. Documents containing such standards shall be incorporated by reference into Part 120 of this chapter.

(c) The Administrator may, if he deems it to be appropriate, call a conference prior to making a determination pursuant to paragraph (a) of this section. If such a conference is called, the

procedures set forth in §§ 122.7-122.14 shall be applicable. However, such a conference shall not be required in the case of any revision initiated under paragraph (a) of this section.

§ 122.5 Initiation of proceedings for revision by the Administrator.

In any case where the Administrator desires revisions in water quality standards of one or more States previously determined by him to meet the requirements of the Act, including revision of water quality criteria or of plans for implementation and enforcement, he shall call a conference in connection therewith and shall proceed in accordance with §§ 122.7-122.14.

§ 122.6 Initiation of revision proceedings by a Governor of an affected State.

(a) If the Governor of the State affected by another State's water quality standards desires revisions in such standards, including revision of water quality criteria or of plans for implementation and enforcement, he shall request the Administrator to initiate a conference for such purpose and he shall submit to the Administrator the following:

(1) A description of the location and nature of the interstate waters to be covered by the conference, the standards to be revised, the nature of the revisions desired and the reason therefor.

(2) A copy of the applicable established water quality standards on which copy matter proposed to be deleted, if any, shall be indicated by hyphens through such matter, and matter proposed to be added, if any, shall be inserted as proposed and shall be underlined.

(b) After receipt of the Governor's request for revision, the Administrator shall proceed in accordance with §§ 122.7-122.14.

§ 122.7 Notice of conference.

(a) In any case where the Administrator finds that the conditions precedent to the calling of a conference pursuant to this part exist, he shall call a conference. The Administrator or his designee shall issue and serve notice of a conference as herein provided.

(b) The notice of conference shall briefly describe the location and nature of the interstate waters to be covered by the conference, the standards to be revised, the nature of the revisions desired and the reason therefor. The conference shall be limited to the matters set forth in the notice.

(c) The notice shall include the name of the chairman before whom the conference will be conducted and shall state the city where and the day when the conference shall be held. The conference shall be held not earlier than thirty (30) days after the service of the notice.

§ 122.8 Service of notice.

(a) The notice of the conference shall be served either personally or by publication on representatives of Federal departments and agencies, interstate

agencies, States, municipalities, and industries. The Administrator or his designee has reason to believe may be affected by, or have an interest in, the proposed revision.

(b) The notice of the conference may be served by mailing a copy thereof to each person, department, or agency to be served at their residence, office, or place of business as ascertained by the Administrator or his designee, as the case may be. Service by mail is complete upon mailing.

(c) The notice of the conference shall be published at least once at least 30 days in advance of the conference date in the FEDERAL REGISTER and in such local newspapers as the Administrator deems to be necessary.

§ 122.9 Parties.

(a) The parties to a conference shall include the persons, departments, and agencies specified in § 122.8(a).

(b) The chairman shall have all the rights of a party to the conference.

(c) Upon application and good cause shown, the chairman may permit any additional interested Federal departments and agencies, interstate agencies, States, municipalities, industries, or other persons to appear for the purpose of presenting a statement or to be admitted as parties to such extent and upon such terms as the chairman shall determine proper.

(d) Any appearance may be in person or by counsel.

(e) The failure of any party to file an appearance or appear at the conference in response to the notice of conference shall not delay the conference and the chairman shall proceed, hear, receive statements, make determinations, and take other appropriate action affecting such party.

§ 122.10 Organization and general procedures of the conference.

(a) The chairman of the conference shall be the Administrator or such employee of the Agency as the Administrator may designate. The chairman shall convene the conference and shall schedule such other meetings as may be necessary, including meetings for the settlement or simplification of issues.

(b) The chairman or his designee shall preside at all conference sessions and meetings called by him.

(c) The conference shall be conducted in an informal but orderly manner. Questions of procedure during a conference shall be determined by the chairman.

(d) The Office of Water Programs in the Environmental Protection Agency shall provide such clerical and technical assistance as may be necessary.

(e) The chairman shall maintain and have custody of all official records and documents pertaining to the conference and shall perform such other duties related to the functioning of the conference as may be necessary.

(f) The chairman shall execute, issue, or serve such notices, reports, communications, and other documents relating to

the functions of the conference as he may deem proper.

§ 122.11 Presentation of material.

The chairman shall prescribe the order for the presentation of material concerning the waters to be covered by the conference. Such material shall include a report by the Office of Water Programs (where the Administrator has proposed revisions) or by the State which has proposed revisions, stating the established standards for said waters, the present quality of said waters, the uses both existing and potential of such waters, and the criteria and implementation schedules necessary to protect and enhance such uses, all as related to the proposed revisions.

§ 122.12 Conference procedure.

(a) Persons making statements need not be sworn or make affirmation. Each party shall be given an opportunity to make a statement concerning the proposed revisions, an opportunity after all parties have been heard to make a further statement which may include comments on or rebuttal of other parties' views, and an opportunity to make recommendations as to the proposed revisions in either his first or subsequent statement.

(b) When necessary, in order to prevent undue prolongation of the conference, the chairman may limit the number of times any party may make a statement and may direct that further statements be made in writing.

(c) The chairman shall exclude irrelevant, immaterial, or unduly repetitious material.

§ 122.13 Record of proceedings.

(a) The proceedings shall be reported verbatim. A transcript of such report shall be a part of the record and the sole official transcript of the proceedings.

(b) All statements, charts, tabulations, and other data shall be received in the record. If a party objects to the admissibility of such material, the objection shall be noted and the chairman shall have a right to rule thereon.

(c) When the statement refers to a statute, or a report, or document, the chairman shall, after satisfying himself of the identification of such statute, report, or document, determine whether the same shall be produced at the conference and physically be made part of the record or shall be incorporated in the record by reference.

(d) The chairman may take official notice of statutes of States and of duly promulgated regulations of any Federal or State agency.

(e) The chairman shall submit to the Administrator the verbatim transcript including all charts, tabulations, and similar data which are part of the conference record.

§ 122.14 Preparation, publication, and promulgation of water quality standards.

(a) Subsequent to submission of the conference transcript and record, the

Administrator shall either: (1) Notify the parties to the conference of his determination that the proposed revisions covered by the conference are not consistent with section 10(c) of the Act or (2) shall prepare regulations setting forth the proposed revisions covered by the conference, with such modifications as he shall deem necessary to conform with section 10(c) (3) of the Act. Such regulations shall be published in the FEDERAL REGISTER.

(b) If, within 6 months from the date the Administrator publishes such regulations, the State has not adopted revisions to its water quality standards which the Administrator finds to be consistent with section 10(c) (3) of the Act, or a petition for public hearing has not been filed under section 10(c) (4) of the Act, the Administrator shall promulgate revisions by publication thereof in the FEDERAL REGISTER. Such revisions shall be effective thirty (30) days after such publication unless a petition for public hearing has been first filed.

(c) At any time prior to thirty (30) days after revisions have been promulgated under paragraph (b) of this section, or thirty (30) days after receipt of notice of the Administrator's determination pursuant to paragraph (a) (1) of this section, the Governor of the State which adopted the standards to be revised, or the Governor of any affected State, may petition the Administrator for a public hearing under section 10(c) (4) of the Act. A petition for a public hearing need not observe any fixed form, but it must be in writing directed to the Administrator and state that the petitioning Governor desires the Administrator to call a public hearing with respect to revision of water quality standards under section 10(c) (4) of the Act, and must identify the interstate waters and the revisions with respect to which such hearing is to be called.

(d) If a petition for a public hearing is filed under section 10(c) (4) of the Act, and the Administrator finds that the conditions precedent to the calling of such a hearing exist, he will call such a hearing and may either fix the time and place thereof, or authorize his designee to do so. Such hearings shall proceed in accordance with the provisions of §§ 104.13-104.24 of this chapter. (1) If the Hearing Board approves the revisions as published or promulgated by the Administrator, the revisions shall take effect on receipt by the Administrator of the Hearing Board's recommendations. (2) If the Hearing Board agrees with the Administrator's refusal to approve revisions, then no revisions shall take effect. (3) If the Hearing Board recommends modifications in the revisions as published or promulgated by the Administrator, or recommends revisions where the Administrator refused to approve revisions, the Administrator shall promulgate revised regulations setting forth the revisions as recommended by the Hearing Board, which revisions will become effective immediately upon such promulgation.

SUBCHAPTER E—PESTICIDE PROGRAMS

PART 162—REGULATIONS FOR THE ENFORCEMENT OF THE FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT

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- 162.117 Interpretation with respect to labeling of household insecticides containing chlordane.
- 162.119 Interpretation concerning labeling claims for germicides, disinfectants, and sanitizers recommended for use in hard water areas.
- 162.120 Interpretation with respect to registration of thallium products for the control of insect and rodent pests in the household.
- 162.121 Interpretation with respect to liquid, powdered and pressurized household insecticides acceptable for depositing insecticidal and chemical residues.
- 162.122 Interpretation with respect to claims for safety and non-toxicity on labeling of economic poisons.
- 162.123 Interpretation with respect to labeling of sodium arsenite or arsenic trioxide products.
- 162.124 Interpretation with respect to labeling of phosphorous paste products.
- 162.125 Interpretation with respect to the term "germ proof" and related terms used in labeling of economic poisons.

AUTHORITY: The provisions of this Part 162 issued under sec. 6, 61 Stat. 168; 7 U.S.C. 135d.

§ 162.1 Words in singular form.

Words used in the singular form in this part shall include the plural, and vice versa, as the case may require.

§ 162.2 Terms defined.

Terms used in this part shall have the meanings set forth for such terms in the Act. In addition, as used in this part, the following terms shall have the meanings stated below:

(a) *Act*. "Act" means the Federal Insecticide, Fungicide, and Rodenticide Act, as amended.

(b) *Director*. "Director" means the Director of the Pesticides Regulation Division, Environmental Protection Agency, or any officer or employee to whom he has heretofore lawfully delegated or to whom he may hereafter lawfully delegate the authority to act in his stead.

(c) *Agency*. "Agency" means the Environmental Protection Agency.

(d) *Economic poison*. "Economic poison" includes all preparations intended for use as insecticides, rodenticides, nematocides, fungicides, herbicides, amphibian and reptile poisons or repellents, bird poisons or repellents, fish poisons or repellents, mammal poisons or repellents, invertebrate animal poisons or repellents, plant regulators, plant defoliants, and plant desiccants. A product shall be deemed to be an economic poison regardless of whether intended for use as pack-

aged or after dilution or mixture with other substances, such as carriers or baits. Products intended only for use after further processing or manufacturing, such as grinding to dust or more extensive operations, shall not be deemed to be economic poisons. Substances which have recognized commercial uses other than uses as economic poisons shall not be deemed to be economic poisons unless such substances are:

(1) Specially prepared for use as economic poisons, or

(2) Labeled, represented, or intended for use as economic poisons, or

(3) Marketed in channels of trade where they will presumably be purchased as economic poisons

(e) *Fungicide*. "Fungicide" includes all preparations intended for preventing, destroying, repelling, or mitigating any fungi or any viruses (other than those on or in living man or other animals). Examples of fungicides include but are not limited to: (1) Plant fungicides, seed fungicides, fungicidal wood preservatives, and mildew and mold preventatives, and (2) Disinfectants, sanitizers, and sterilizers, except those for use only on or in living man or other animals.

(f) *Herbicide*. "Herbicide" means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any weed, including any algae or other aquatic weed, or any plant parts growing where not wanted.

(g) *Nematocide*. "Nematocide" includes only those products intended for preventing, destroying, repelling, or mitigating nematodes inhabiting soil, water, plants, or plant parts. The term does not include products intended for use against nematodes in or on living man or other animals.

(h) *Plant regulator*. "Plant regulator" includes those substances intended to alter the behavior of ornamental or crop plants or the produce thereof through physiological rather than physical action. The term includes, but is not limited to, substances intended to accelerate or retard the rate of growth or maturation of ornamental or crop plants, enhance fruit set, prevent fruit drop, accelerate root formation and elongation, prolong or break dormancy of ornamental or crop plants or the produce thereof, but shall not include substances intended solely for use as plant nutrients or fertilizers.

(i) *Active ingredient*. An "active ingredient" is an ingredient which: (1) Is capable in itself, and when used in the same manner and for the same purposes as directed for use of the product, of preventing, destroying, repelling, or mitigating insects, fungi, rodents, weeds, nematodes, or other pests, or altering through physiological action the behavior of ornamental or crop plants or the produce thereof, or causing leaves or foliage to drop from a plant, or artificially accelerating the drying of plant tissue.

(2) Is present in the product in an amount sufficient to add materially to its effectiveness; and

(3) Is not antagonistic to the activity of the principal active ingredient: *Provided, however*, That the Director may require an ingredient to be designated as an active ingredient if, in his opinion, it sufficiently increases the effectiveness of the economic poison to warrant such action.

(j) *Official inspector*. "Official inspector" means any employee or agent of the Environmental Protection Agency or the Treasury Department authorized by the Director or by the Secretary of the Treasury to make investigations in connection with enforcement of the Act.

(k) *Vertebrate animals*. "Vertebrate animals" means all species of the subphylum vertebrata including domestic vertebrates and vertebrate species of fish and wildlife.

(l) *Invertebrate animals*. "Invertebrate animals" means all forms of animal life other than vertebrate animals, including both domestic and wild species.

§ 162.3 Administration.

The Director is authorized to take such action as, in his discretion, may be necessary in the administration and enforcement of the Act and the regulations in this part.

LABELING

§ 162.4 Labeling required.

Every economic poison shall bear a label containing the information specified in the Act and the regulations in this part.

§ 162.5 Language to be used.

All statements, words, and other information required by the Act or the regulations in this part to appear on the label or labeling of any economic poison shall be in the English language: *Provided*, That shipments of articles intended solely for sale in foreign countries may bear labels or labeling in the appropriate foreign language. The Director may permit the use of an appropriate foreign language version of the label or labeling in addition to the English version on products intended for distribution in areas of the United States where a large percentage of the population does not speak English.

§ 162.6 Labeling.

(a) *Contents of label and labeling*. The label of every economic poison must show, clearly and prominently, the name, brand or trademark under which the product is sold; the name and address of the manufacturer, registrant, or person for whom manufactured; the net contents as prescribed in paragraph (e) of this section; an ingredient statement as prescribed in § 162.7; the registration number assigned to the economic poison as prescribed in paragraph (f) of this section, and an appropriate warning or caution statement as prescribed in § 162.9. The label or labeling of every economic poison must bear directions for use which are necessary and if complied with, adequate for the protection of the public.

(b) *Placement of label.* The label shall appear on the economic poison or the immediate container thereof. If the immediate container is enclosed within a wrapper or outside container through which the label cannot be clearly read by a person with normal vision, the label must also appear on such outside wrapper or container if it is a part of the retail package.

(c) *Name and address of manufacturer, distributor, packer, formulator, or registrant.* An unqualified name and address given on the label shall be considered as the name and address of the manufacturer. If the registrant's name appears on the label and the registrant is not the manufacturer, or if the name of the person for whom the economic poison was manufactured appears on the label, it must be qualified by appropriate wording such as "Packed for * * *," "Distributed by * * *," or "Sold by * * *" to show that the name is not that of the manufacturer. If a person has two or more locations at which an economic poison is manufactured or packaged, or from which it is distributed, the name and address of the person's principal office will be accepted except in cases where the Director determines that the address of the exact location is necessary for the protection of the public. The address of the manufacturer, registrant, or person for whom manufactured shall include the street address, if any, unless the street address is shown in a current city directory or telephone directory.

(d) *Name, brand, or trade-mark of economic poison.* The name, brand, or trade-mark of the economic poison, appearing on the label shall be that under which the economic poison is registered.

(e) *Net content.* (1) The net content shall be exclusive of wrappers or other material, and shall be deemed to be average content unless stated as a minimum quantity.

(2) Net content shall be stated in the terms of weight or measure in general use by consumers and users of the type of economic poison to give accurate information as to the quantity of the economic poison. If there is no general use, the net content statement shall be in terms of liquid measure if the product is a liquid, and in terms of weight if it is solid, semi-solid, viscous, or a mixture of liquid and solid. Statements of liquid measure shall be in terms of the United States gallon, quart, pint, and fluid ounce at 68° F. The statements of weight shall be in terms of avoirdupois pound and ounce. All statements of net content shall be in terms of the largest unit present.

(3) If the contents are stated as a minimum quantity, variation below the stated quantity is not permissible and variation above shall not be unreasonably large.

(4) If the contents are not stated as a minimum quantity, variation shall be permitted only to the extent that it represents deviations unavoidable in good packing practice. The average quantity in the packages in a shipment shall not fall below the average quantity stated,

nor shall there be any unreasonable variation from the average in the contents of any package.

(f) *Registration number.* The registration number assigned to an economic poison at the time of registration shall appear on the label of such economic poison. The number must be the same as that appearing on the notice of registration and shall be preceded by the phrase "EPA Registration No.," or the phrase "EPA Reg. No." all of which shall be in type of a size and style similar to other print on that part of the label on which it appears and shall run parallel to it. The registration number shall not appear in a manner which would make it misleading to the public.

(g) *Legibility of label and labeling.* All words, statements, graphic representations, or designs required by the regulations in this part to appear on the label or labeling must be clearly legible and easy to read by a person with normal vision. The signal word, when required, and the statement "Keep out of reach of children" prescribed in § 162.9(a) shall be of a size bearing a reasonable relationship to the other type on the front part of the label and to the size of the container. The signal word, when required, shall not be less than 18 point type and the said warning statement shall not be less than 12 point type, unless the label space on the container is too small to accommodate such type sizes in which case the Director shall prescribe the type size. When the size of the label space requires a reduction in type size, the reduction shall be made to a size no smaller than is necessary and in no event to a size smaller than 6 point type.

§ 162.7 Ingredient statement.

(a) *Location of ingredient statement.* The ingredient statement must appear on the front panel or that part of the label displayed under customary conditions of purchase, except in cases where the Director determines that, due to the size or form of the container, a statement on that portion of the label is impracticable, and permits such statement to appear on another side or panel of the label. Regardless of the placement of the ingredient statement on the label, it shall be sufficiently prominent and in type size which can be easily read by a person with normal vision. The ingredient statement must run parallel with other printed matter on the panel of the label on which it appears and must be on a clear contrasting background not obscured or crowded.

(b) *Names of ingredients.* The well-known common name of each of the listed ingredients must be given or, if an ingredient has no common name, the correct chemical name which conforms most closely with generally accepted rules of chemical nomenclature. If there is no common name and the chemical composition is complex, the Director may permit the use of a new or coined name which he finds to be appropriate for the information and protection of the user. If the use of a new or coined name is permitted, the Director may prescribe the terms under which it may be used.

A trade-mark or trade name shall not be used as the name of an ingredient except when it has become a common name.

(c) *Percentages of ingredients.* Percentages of ingredients shall be determined by weight and the sum of the percentages of the ingredients shall be 100. Sliding scale forms of ingredient statements shall not be used.

(d) *Designation of ingredients.* (1) Active ingredients and inert ingredients shall be so designated, and the term "inert ingredients" shall appear in the same size type and be equally as prominent as the term "active ingredients."

(2) If the name but not the percentage of each active ingredient is given, the names of the active and inert ingredients shall, respectively, be shown in the descending order of the percentage of each present in each classification and the name of each ingredient shall be given equal prominence.

(e) *Active ingredient content.* As long as an economic poison is subject to the Act the percentages of active ingredients in the economic poison shall be those declared in the ingredient statement.

§ 162.8 Economic poisons highly toxic to man.

(a) Economic poisons which fall within any of the following categories when tested on laboratory animals as specified in subparagraphs (1), (2), or (3) of this paragraph are highly toxic to man or contain substances or quantities of substances highly toxic to man within the meaning of the Act (such economic poisons being hereinafter in this part referred to as economic poisons highly toxic to man): *Provided, however,* That the Director may, upon application and after opportunity for hearing, exempt any economic poison which is in any of these categories, but which is not in fact highly toxic to man, from the requirements of the Act and the regulations in this part with respect to economic poisons highly toxic to man:

(1) *Oral toxicity.* An economic poison which has a single dose LD₅₀ of 50 milligrams or less per kilogram of body weight when administered orally to both male and female rats which have been fasted for a period of 24 hours (or to other rodent or nonrodent species specified by the Director); or

(2) *Toxicity on inhalation.* An economic poison which has an LC₅₀ of 2,000 micrograms or less of dust or mist per liter of air or 200 parts per million or less by volume of a gas or vapor, when administered by continuous inhalation for one hour to both male and female rats (or to other rodent or nonrodent species specified by the Director), if the Director finds that it is reasonably foreseeable that such concentration will be encountered by man; or

(3) *Toxicity by skin absorption.* An economic poison which has an LD₅₀ of 200 milligrams or less per kilogram of body weight when administered by continuous contact for twenty-four hours with the bare skin of rabbits (or other rodent or nonrodent species specified by the Director).

(b) *Tests on other species.* Tests on other specified rodent or nonrodent species may be required by the Director with respect to individual economic poisons or to classes of economic poisons whenever he finds that tests on other species are necessary to determine whether an economic poison is highly toxic to man.

(c) *Terms LD₅₀ and LC₅₀.* An LD₅₀ as used in connection with oral toxicity and skin absorption toxicity tests specified in paragraph (a) (1) and (3) of this section is the dose and LC₅₀ as used in connection with inhalation tests specified in paragraph (a) (2) of this section is the concentration which is expected to cause death within 14 days in 50 percent of the test animals so treated.

(d) *Toxicity based on human experience.* If the Director finds, after opportunity for hearing, that available data on human experience with any economic poison indicate a toxicity greater than that determined from the above described tests on animals, the human data shall take precedence and, if he finds that the protection of the public so requires the Director shall declare such an economic poison to be highly toxic to man for the purposes of this Act and the regulations thereunder.

§ 162.9 Warning or caution statement.

Warning or caution statements, which are necessary and, if compiled with, adequate to prevent injury to living man and useful vertebrate animals, useful vegetation, and useful invertebrate animals, must appear on the label in a place sufficiently prominent to warn the user, and must state clearly and in nontechnical language the particular hazard involved in the use of the economic poison, e.g., ingestion, skin absorption, inhalation, flammability or explosion, and the precautions to be taken to avoid accident, injury, or damage.

(a) The label of every economic poison shall bear warnings or cautions which are necessary for the protection of the public, including the statement, "Keep out of reach of children," and a signal word such as "Danger," "Warning," or "Caution" as the Director may prescribe, on the front panel or that part of the label displayed under customary conditions of purchase: *Provided, however,* The Director may permit reasonable variations in the placement of that part of the required warnings and cautions other than the statement "Keep out of reach of children" and the required signal word, if in his opinion such variations would not be injurious to the public. If an economic poison is marketed in channels of trade where the likelihood of contact with children is extremely remote, or if the nature of the product is such that it is likely to be used on infants or small children without causing injury under any reasonably foreseeable conditions, the Director may waive the requirement of the statement "Keep out of reach of children" if in his opinion such a statement is not necessary to prevent injury to the public. The Director may permit a statement such as "Keep away from infants and small chil-

dren" in lieu of the statement "Keep out of reach of children" if he determines that such a variation would not be injurious to the public.

(b) The label of every economic poison which is highly toxic to man as described in § 162.8 shall bear the word "Danger" along with the word "Poison" in red on a contrasting background in immediate proximity to the skull and crossbones and an antidote statement including directions to call a physician immediately, on the front panel or that part of the label displayed under customary conditions of purchase: *Provided, however,* The Director may permit reasonable variations in the placement of the antidote statement if some reference such as "See antidote statement on back panel" appears on the front panel near the word "Poison" and the skull and crossbones.

REGISTRATION

§ 162.10 Registration.

(a) *Eligibility.* Any manufacturer, packer, seller, distributor, or shipper of an economic poison is eligible to apply for registration of such economic poison.

(b) *Effect of registration.* If an economic poison is registered under the Act no further registration under the Act by other persons is required: *Provided,* That

(1) The product is in the manufacturer's or registrant's original unbroken immediate container; and

(2) The claims made for it and the directions for its use do not differ from the representations made in connection with registration; and

(3) The product contains the labeling accepted in connection with registration and otherwise complies with the Act.

(c) *Procedure for registration.* Applications for registration should be addressed to Pesticides Regulation Division, Environmental Protection Agency, Washington, D.C., 20250. Application forms will be furnished upon request. All applications for registration shall be accompanied by duplicate copies of the proposed labeling, including all printed or graphic matter which is to accompany the economic poison at any time and, if requested by the Director, a full description of the tests made and the results thereof upon which the claims for the economic poison are based, together with such other information as may be necessary to assure compliance with the Act and the regulations in this part. If any part of the proposed labeling submitted is in a foreign language, it shall be accompanied by an accurate and complete English translation. Applications should be submitted as far in advance as possible, and at least 30 days, before it is desired that registration take effect. However, the period of time required to process applications to determine the adequacy of the proposed labeling may exceed 30 days in some cases. Applications which require consultation with other governmental agencies will take a longer period of processing. No fees are charged for registration.

(d) *Registration number.* When an economic poison is registered under the Act, the Director shall assign a registra-

tion number to the economic poison. The registration number shall consist of a number assigned to the registrant, immediately followed by a hyphen and a number assigned to the product.

(e) *Effective date of registration.* Registration of an economic poison shall become effective on the date the notice of registration is issued.

(f) *Responsibility of applicant for registration.* The applicant for registration is responsible for the accuracy and completeness of all information submitted in connection with his application for registration of an economic poison.

(g) *Changes in labeling or formulas.*

(1) Changes in the labeling or changes in the formula of a registered economic poison must be submitted in advance to the Pesticides Regulation Division, Environmental Protection Agency, Washington, D.C. 20250. The registrant must describe the exact changes desired and the proposed effective date and, upon request, shall submit a description of tests which justify such changes.

(2) After the effective date of a change in labeling or formula, the product shall be marketed only under the new claims or formula: *Provided, however,* The Director may permit a reasonable time for the disposition of stocks of the discontinued product, if in his opinion such an extension would not endanger the public.

(h) *Claims must conform to registration.* Claims made for an economic poison must not differ from representations made in connection with registration, including representations with respect to effectiveness, ingredients, directions for use, or pests against which the product is recommended.

(i) *Duration of registration.* If at any time it does not appear to the Director that the economic poison is such as to warrant the proposed claims for it or if the economic poison and its labeling and other material required to be submitted do not comply with the provisions of the Act, the Director shall notify the registrant of the facts involved and afford him an opportunity to bring the product and its labeling into compliance with the Act. If after a reasonable period of time, the registrant has not made such corrections, the Director may cancel the registration under the provisions of section 4.c. of the Act. Unless cancelled in accordance with this paragraph or with the acquiescence of the registrant, or unless continued in effect in accordance with the provisions of paragraph (j) of this section, the registration of an economic poison shall be cancelled at the end of a period of five years following the date of registration of such economic poison, or at the end of five years following the date of any subsequent registered change in formula or labeling, or at the end of five years following the date of any continuance of registration pursuant to paragraph (j) of this section: *Provided, however,* That prior to any such cancellation the Pesticides Regulation Division shall send to the registrant a notice of intent to cancel, and, in the event such notice is not sent to the registrant 30 days prior to the expiration of the five-year period, the registration shall remain in effect until 30 days following the date such

notice has been sent to the registrant at his latest address submitted to the Pesticides Regulation Division.

(j) *Continuance of registration.* If a registrant desires to continue the registration in effect, he shall notify the Pesticides Regulation Division in writing and it shall be continued in effect under the same terms as the original registration: *Provided, however,* That if, on the basis of information available at the time, it appears that the product or its labeling fails to comply with the Act, the registrant shall be so notified and afforded the opportunity to make the necessary corrections. If the corrections are not made, registration will be cancelled as provided in section 4.c. of the Act.

(k) *Limitations on registrations.* The Director may refuse to register any economic poison or any specific use thereof if, in his opinion, directions and warnings cannot be written which will prevent injury to the general public when the product is used in accordance with warnings and directions or in accordance with commonly recognized practices. If, however, such an economic poison is proposed for certain acceptable uses, the Director may require the label to bear a warning against specific unacceptable uses such as in the home or home garden.

GUARANTEES

§ 162.11 Guarantee of economic poison.

(a) *By whom given; effect of guarantee.* Any manufacturer, distributor, wholesaler, or other person residing in the United States may furnish to any person to whom he sells an economic poison a guarantee that the economic poison was lawfully registered at the time of sale and delivery to such person, and that the economic poison complies with all the requirements of the Act and of the regulations in this part. The Act provides that penalties for violation of section 3.a. of the Act shall not apply to a person who establishes that he has received a guarantee as specified in the Act.

(b) *Reference to guarantee.* No reference to a guarantee or suggestion that such a guarantee has been given shall be made in the labeling of any economic poison.

(c) *Contents of guarantee.* In order to afford effective protection, each guarantee must:

(1) Be signed by and contain the name and address of the person giving it; and
(2) State that the economic poison was lawfully registered at the time of sale and delivery and that it complies with all other requirements of the Federal Insecticide, Fungicide, and Rodenticide Act.

(d) *Scope of guarantee.* A guarantee may be (1) limited to a specific shipment or other delivery of a product, in which case it may be a part of or attached to the invoice or bill of sale covering such shipment or delivery, or (2) general and continuing, in which case, in its application to any shipment or other delivery of a product it shall be considered to have been given at the date when such product

was shipped or delivered by the person giving the guarantee.

(e) *Expiration of guarantee.* Any guarantee shall expire when the product is repacked or relabeled by the purchaser or when it becomes in violation of the Act or the regulations in this part after shipment or other delivery by the person giving the guarantee.

(f) *Forms of guarantee.* The following are suggested forms of guarantee:

(1) *Limited form for use on invoice or bill of sale.*

----- hereby guarantees
(Name of guarantor)
that the economic poison herein listed is lawfully registered with the Secretary of Agriculture and that the same complies with all requirements of the Federal Insecticide, Fungicide, and Rodenticide Act.

(Signature and post office address of guarantor)

(Date)

(2) *General and continuing form.*

The economic poisons comprising each shipment or other delivery hereafter made by ----- to or on the order of
(Name of guarantor)

----- are hereby
(Name and address of person receiving guarantee)
guaranteed to be lawfully registered with the Secretary of Agriculture and to comply with all requirements of the Federal Insecticide, Fungicide, and Rodenticide Act, as of the date of such shipment or delivery.

(Signature and post office address of guarantor)

(Date)

COLORATION OF ECONOMIC POISONS

§ 162.12 Coloration and discoloration.

The white economic poisons herein-after named shall be colored or discolored in accordance with this section. The hues, values, and chromas specified are those contained in the Munsell Book of Color, Munsell Color Company, 10 East Franklin Street, Baltimore, Md.

(a) *Coloring agent.* The coloring agent must produce a uniformly colored product not subject to change in color beyond the minimum requirements specified in the regulations in this part during ordinary conditions of marketing or storage, and must not cause the product to be ineffective or result in its causing damage when used as directed.

(b) *Arsenicals and barium fluosilicate.* Standard lead arsenate, basic lead arsenate, calcium arsenate, magnesium arsenate, zinc arsenate, zinc arsenite, and barium fluosilicate shall be colored any hue, except the yellow-reds and yellows, having a value of not more than 8 and a chroma of not less than 4, or shall be discolored to a neutral lightness value not over 7.

(c) *Sodium fluoride and sodium fluosilicate.* Sodium fluoride and sodium fluosilicate shall be colored blue or green having a value of not more than 8 and a chroma of not less than 4, or shall be discolored to a neutral lightness value not over 7.

(d) *Exceptions.* (1) Notwithstanding the provisions of paragraphs (b) and (c) of this section, the Director, after opportunity for hearing, may permit other hues to be used for any particular purpose if he determines that use of the prescribed hues is not feasible for such purpose and that such action will not be injurious to the public.

(2) Any economic poison specified in this part which is intended solely for use by a textile manufacturer or commercial laundry, cleaner or dyer as a mothproofing agent, which would not be suitable for such use if colored and which will not come into the hands of the public except when incorporated into a fabric may be exempted by the Director from the requirements of section 3.a.(4) of the Act and the requirements of this section.

(3) The economic poison sodium fluoride shall be exempt from the requirements of section 3.a.(4) of the Act and paragraph (c) of this section when (i) it is intended for use as a fungicide solely in the manufacture or processing of rubber, glue, or leather goods; (ii) coloration of the economic poison in accordance with said requirements will be likely to impart objectionable color characteristics to the finished goods; (iii) the economic poison will not be present in such finished goods in sufficient quantities to cause injury to any person; and (iv) the economic poison will not come into the hands of the public except after incorporation into such finished goods.

ADULTERATION AND MISBRANDING

§ 162.13 Adulteration.

An economic poison is adulterated if its strength or purity falls below the professed standard or quality as expressed on its labeling or under which it is sold, or if any substance has been substituted wholly or in part for the article, or if any valuable constituent of the article has been wholly or in part abstracted.

(a) A valuable constituent will be considered as wholly abstracted whenever the designation or representation of the product imports its presence therein and such constituent has been wholly omitted therefrom in the preparation of the product or has been wholly removed from the completed product.

(b) A valuable constituent will be considered as partly abstracted whenever the designation or representation of the product imports its presence therein, and such constituent is not present in the usual or customary amount or in the amount indicated in the labeling.

§ 162.14 Misbranding.

An economic poison or device is misbranded if the article or its labeling is false or misleading to the public in any particular.

(a) Examples of statements or representations in the labeling of an economic poison or device which render it misbranded are the following:

(1) A false or misleading statement concerning composition of the product.

(2) A false or misleading statement concerning the effectiveness of the product as an economic poison or device.

(3) A false or misleading statement about the value of the product for purposes other than as an economic poison or device.

(4) A false or misleading comparison with other economic poisons or devices.

(5) Unwarranted claims as to the safety of the economic poison or its ingredients, including a statement such as "safe," "non-poisonous," "non-injurious," or "harmless" with or without such a qualifying phrase as "when used as directed": *Provided, however,* That the Director may permit a truthful statement such as "non-toxic to humans and pets" on those products which are determined by the Director to be non-toxic to humans and pets.

(6) Any statement directly or indirectly implying that the economic poison or device is recommended or endorsed by any agency of the Federal Government.

(7) The name of an economic poison which contains two or more principal active ingredients if it suggests the name of one or more but not all such principal active ingredients even though the names of the other ingredients are stated elsewhere in the labeling.

(8) Prominent reference in the labeling to one or more active ingredients without giving their percentages in immediate proximity thereto or without giving equal prominence to the other active ingredients or to the inert ingredients.

(9) A true statement used in such a way as to give a false or misleading impression to the purchaser.

(b) *Justification of false and misleading statements not permitted.* (1) The use of any false or misleading statement on any part of the labeling, given as the statement or opinion of any person or based upon such statement or opinion, shall not be justified by the fact that the statement or opinion is actually that of such person.

(2) The use of a false or misleading statement in the labeling cannot be justified by an explanatory statement.

ENFORCEMENT

§ 162.15 Enforcement.

(a) *Collection of samples.* Samples of economic poisons and devices shall be collected by official inspectors or by any employee of the Federal Government, or of a State or Territory, or political subdivision thereof who has been duly authorized by the Director to collect samples.

(b) *Examination of samples.* Methods of examination of samples shall be those adopted and published by the Association of Official Agricultural Chemists, where applicable, or such other methods as the Director may find necessary to determine whether the product complies with the law.

(c) *Notice of apparent violation.* (1) If, from an examination or analysis, an economic poison or device appears to be

in violation of the Act, a notice in writing shall be sent to the person against whom criminal proceedings are contemplated, giving him 20 days within which to offer such written explanation as he may desire. The notice shall state the manner in which the sample fails to meet the requirements of the Act and the regulations thereunder.

(2) Any such person may, in addition to his reply to such notice, file within 20 days of its receipt a written request for an opportunity to present his views orally in connection therewith.

(3) No notice or hearing is required prior to the seizure of any economic poison or device.

§ 162.16 Notices of judgment.

Publication of notices of judgments of the courts in cases arising under the criminal or seizure provisions of the Act shall be made in the form of notices, circulars, or bulletins as the Director may prescribe.

TEMPORARY PERMITS

§ 162.17 Limited shipments for experimental purposes.

Temporary permits not to exceed a period of one year may be issued for shipment of limited amounts of a product which is to be tested further, usually on a larger scale, to determine its limitations. Permits will be issued only for bona fide experimental programs under the supervision of qualified persons. The Director may require the submission of such information and data concerning the product and the program which he deems necessary for the protection of the public. If, in the opinion of the Director, such information has not been submitted he may, for the protection of the public, refuse to issue the permit.

(a) *Articles for which no permit is required.* (1) A substance or mixture of substances being put through tests in which the purpose is only to determine its value for economic poison purposes or to determine its toxicity or other properties, and where the user does not expect to receive any benefit in pest control from its use, is not considered an economic poison within the meaning of section 2a of the Act. Therefore, no permit under the Act is required for its shipment.

(2) An economic poison shipped or delivered for experimental use by or under the supervision of any Federal or State agency authorized by law to conduct research in the field of economic poisons shall not be subject to the provisions of the Act and the regulations in this part.

(b) *Articles for which permit is required.* (1) An economic poison shipped or delivered for experimental use by qualified persons but not under the supervision of a Federal or State agency authorized by law to conduct research in the field of economic poisons, for which a permit has been issued by the Director pursuant to the provisions of this section, shall otherwise be exempt from the provisions of the Act and of the regulations in this part. Permits will be of two

types, specific and general. A specific permit will be issued to cover a particular shipment on a specified date to a named person. A general permit will be issued to cover more than one shipment over a period of time to the same or different persons.

(2) If an economic poison is to be tested in such a manner that residues may result in or on food or feed, a permit for shipment will not be issued unless:

(i) Sufficient data are submitted to the Director to show that no residue will be present on food or feed involved in the experimental program or

(ii) A tolerance or exemption from the need of a tolerance or a temporary tolerance or exemption from the need of a temporary tolerance, has been established by the Environmental Protection Agency to cover any detectable residue which may be present on food or feed involved in the experimental program and sufficient data are submitted to the Director to show that such program will not result in any residue in excess of any such tolerance or

(iii) The food or feed derived from the experimental program will be destroyed or fed only to laboratory animals or otherwise disposed of in a manner which will protect the public and which is approved by the Director.

(3) A permit for shipment of any experimental economic poison for testing in any place likely to be frequented by people will be granted only if it is clearly shown in the application for such permit that the applicant's instructions for use reasonably assure the avoidance of injury to all persons concerned.

(4) All applications for permits covering shipments for experimental use shall be filed in duplicate with the Pesticides Regulation Division, Environmental Protection Agency, Washington, D.C. 20250, and must be signed by the shipper and must contain the following:

(i) A certification to the effect that food or feed derived from the experimental program will not be used or offered for consumption or sale for consumption, except by laboratory or experimental animals if illegal residues are present in or on such food or feed.

(ii) Name and address of the shipper and place or places from which the shipment will be made.

(iii) Proposed date of shipment or proposed shipping period not to exceed one year.

(iv) A statement of the composition of material to be covered by the permit which should apply to a single material or group of closely allied formulations of the material.

(v) A statement of the approximate quantity of material to be shipped.

(vi) Available data or information, or reference to available data or information, on the toxicity of the economic poison.

(vii) A statement of the nature of the proposed experimental program, including designation of the type of pests or organisms to be experimented with, the crops or animals on which the economic

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poison is to be used, a statement of the dates during which the proposed experimental program will be conducted, and the states or geographical areas where it is proposed to conduct the program, and including the results of previous tests where necessary to justify the issuance of a permit for the quantity requested.

(viii) The percentage of the total quantity of material specified under subdivision (v) of this subparagraph which will be supplied without charge to the user.

(ix) A statement that the economic poison is intended for experimental use only.

(x) Proposed labeling which must bear (a) the prominent statement "For Experimental Use Only" on the container label and any accompanying circular or other labeling, (b) a warning or caution statement if in the opinion of the Director it is necessary, which statement shall, if complied with, be adequate in his opinion, for the protection of those who may handle or be exposed to the experimental formulations, (c) the name and address of the applicant for the permit, (d) the name or designation of the formulation, (e) an ingredient statement as prescribed in § 162.7, and (f) necessary directions for use including crops or sites to be treated, limitations on dosage to be used, and if the economic poison is to be tested on food or feed crops the number of days required between last application and harvest.

(5) The Director may limit the quantity of economic poison covered by a permit to such less quantity than requested as he may determine if the available information on effectiveness, or toxicity or other hazards, is not sufficient to justify the scope of experimental use proposed in the application, or may make such other limitations in the permit as he may determine to be necessary for the protection of the public.

(6) Reports on experimental program: During the period in which a permit is effective, the holder shall submit to the Director periodic reports regarding the status of the experimental program. Reports shall be submitted at 3-month intervals and at the end of the experimental program. These reports shall include the following information:

(i) Amount of the economic poison shipped during reporting period.

(ii) Name and address of consignee of each shipment.

(iii) A summary of data on effectiveness, phytotoxicity, or other pertinent information obtained during the reporting period.

(iv) Any additional data on residues or analytical methods obtained during the reporting period.

(v) Any additional data on toxicity obtained during the reporting period.

(vi) Such other information and data as the Director may require.

The Director may at any time request additional reports on the experimental program if, in his opinion, such reports are necessary for the protection of the public.

(7) An economic poison shipped under a permit shall not be offered for general retail sale.

(c) *General permit for economic poisons for experimental use which are also subject to the new drug requirements of the Federal Food, Drug, and Cosmetic Act.* (1) Notwithstanding the provisions of paragraph (b) of this section, a general permit is hereby issued under section 7.a.(4) of the Act to the manufacturers and shippers of economic poisons for experimental use only, to ship such economic poisons: *Provided*, (i) That the product is a "new drug" within the meaning of section 201(p) and 505 of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. sec. 321(p) and sec. 355); (ii) that it is subject to, and the manufacturer or shipper complies with, the provisions of section 505(d) of said Act (21 U.S.C. sec. 355(d)) and § 130.3 of the regulations (21 CFR 130.3) thereunder; and (iii) that the documents referred to in said § 130.3 shall be made available for inspection upon the request of any officer or employee of the Environmental Protection Agency at any reasonable time within two years after the introduction of the product into interstate commerce.

(2) The general permit referred to in the preceding subparagraph shall apply only insofar as the experimental uses are for drug purposes within the meaning of the Federal Food, Drug, and Cosmetic Act. It shall not apply to other experimental uses even though the product may be intended for both drug and non-drug uses.

(d) *Cancellation of permits.* Any permit for shipment for experimental use may be canceled at any time for any violation of the terms thereof or if it shall appear to the Director that the permit should be canceled for the protection of the public.

§§ 162.18-162.24 [Reserved]

DECLARATION OF PESTS

§ 162.25 Forms of plant and animal life and viruses declared to be pests.

(a) Each of the following forms of plant and animal life and viruses is declared to be a pest under the Act when it exists under circumstances that make it injurious to plants, man, domestic animals, other useful vertebrates, useful invertebrates, or other articles or substances:

Mammals, including but not limited to dogs, cats, moles, bats, wild carnivores, armadillos, and deer;

Birds, including but not limited to starlings, English sparrows, crows, and blackbirds;

Fishes, including but not limited to the jawless fishes such as the sea lamprey, the cartilaginous fishes such as the sharks, and the bony fishes such as the carp;

Amphibians and reptiles, including but not limited to poisonous snakes;

Aquatic and terrestrial invertebrates, including but not limited to slugs, snails, and crayfish;

Roots and other plant parts growing where not wanted;

Viruses, other than those on or in living man or other animals.

§ 162.30 Definitions.

All terms used in §§ 162.30 to 162.36, inclusive, shall have the meaning set forth for such terms in the Federal Insecticide, Fungicide, and Rodenticide Act and § 162.2 of the regulations promulgated by the Administrator of the Environmental Protection Agency thereunder. In addition the term "Collector of Customs" means any person authorized under the customs laws and regulations to perform the duties of a collector of customs.

CROSS REFERENCE: For regulations of the Bureau of Customs, Department of the Treasury, see 19 CFR Chapter 1.

§ 162.31 Registration.

All economic poisons are required to be registered under the provisions of section 4 of the act, and § 162.10 of the regulations promulgated by the Administrator of the Environmental Protection Agency thereunder before being permitted entry into the United States.

§ 162.32 Declaration.

All invoices of economic poisons and devices imported into the United States shall be accompanied by a declaration of the shipper as follows:

I, _____, the undersigned, do hereby declare that I am the _____ (Name in full) of the _____ (Manufacturer or shipper) of the merchandise herein mentioned, which consists of economic poisons or devices or both. None of this merchandise is adulterated or misbranded or otherwise violates the prohibitions set forth in the Federal Insecticide, Fungicide, and Rodenticide Act in any respect, or is dangerous to the health of the people of the United States, or is of a kind forbidden entry into, or forbidden to be sold or restricted in sale in the country in which it is made, or from which it is exported. The merchandise was manufactured in _____ by _____ (Country) _____ (Name of manufacturer) and is exported from _____ (City) consigned to _____ (City) Dated at _____ this _____ day of _____, 19____ (Signature)

§ 162.33 Notice of shipments for importation.

The Collector of Customs shall notify the Director of all shipments of economic poisons and devices being imported into the United States and shall detain all such shipments until notified by the Director that the shipment may be released.

§ 162.34 Drawing of samples of import shipments.

The Collector of Customs shall, upon request by the Director, draw samples of import shipments of economic poisons and devices, and deliver them together with a copy of the labeling, and all accompanying circulars and advertising matter pertaining to such merchandise to the designated laboratory of the Environmental Protection Agency.

§ 162.35 Bond for release of imports pending examination.

Consignments of economic poisons and devices offered for importation into the United States may be detained pending examination to determine whether or not they comply with the requirements of the act, or they may be released to the consignee prior to such examination upon the execution of a customs single-entry or term bond in the appropriate form and in the amount prescribed in regulations of the Bureau of Customs, United States Treasury Department, in force on the date of entry, and containing a provision for the redelivery of the merchandise or any part thereof upon the demand of the Collector of Customs at any time. The bond shall be filed with the Collector of Customs, who, in case of default, shall take appropriate action to effect the collection of all liquidated damages provided for in the bond.

§ 162.36 Procedure after examination.

(a) If, upon examination or analysis of a sample from an import consignment of economic poisons or devices, such sample is found not to be in violation of the act, the Director shall notify the Collector of Customs that the shipment may be released. However, if, upon examination or analysis of the sample and consideration of other evidence in the case such sample is found to be in violation of the act, the owner or consignee shall be notified promptly by the Director of the nature of the violation and be given a reasonable time, not to exceed sixty days, to submit written material or, at his option, to appear before the Director and introduce testimony, to show cause why the shipment should not be destroyed or refused entry.

(b) If, after consideration of all of the evidence in the case, it still appears that the consignment may not lawfully be admitted into the United States, the Director shall notify the Collector of Customs that the merchandise is in violation of the act and the nature of the violation, and thereupon the Secretary of the Treasury (1) shall refuse delivery to the consignee and, under such regulations as he may prescribe, shall cause the destruction of any merchandise not exported by the consignee within 3 months from the date of notice of such refusal of entry or (2) if the shipment has been released to the consignee under bond, shall take action to enforce the terms of said bond.

INTERPRETATIONS

§ 162.100 Interpretation as to applicability of act and regulations to operations of pest control operators.

(a) The question has arisen as to whether the requirements of the Federal Insecticide, Fungicide, and Rodenticide Act and the regulations promulgated thereunder are applicable to the situation in which a commercial pest control operator, as a part of his service operation, carries his own economic poisons from one State to another for application by him in his work, the material remaining in his sole and actual possession until

applied. There would seem to be no question but that the substances carried by the operator are economic poisons within the literal wording of the act and the regulations. However, the purpose of the act and the regulations in requiring proper registration and labeling of the regulated substances is to protect the purchaser or user of such substances. In the situation in question, there is no purpose of sale of the substances as such or the use thereof by others. The operator is hired to control pests and as a part of his service work applies the substances. Under these circumstances it would seem that so long as the economic poisons remain in the operator's sole and actual custody, nothing would be accomplished by requiring the registration of the substances and their proper labeling, including ingredient statements, directions for use, poison indicia, warning statements, etc. The substances are applied presumably by experts who are familiar with the nature of such substances and the risks involved. It would not appear that the activities of a commercial pest control operator, outlined above, fall within the spirit or intent of the registration and labeling provisions of the act or the regulations. Of course, any substances sold by such an operator or left by him unapplied would be subject to the act and the regulations.

(b) While the requirements of the act and the regulations as to registration and labeling appear to have been intended primarily for the protection of purchasers and users of economic poisons, the requirements as to coloring or discoloring of economic poisons appear to be largely for the protection of the public generally, which might come in contact with the economic poisons in unmixing form either before or after use. This being so, it is considered that requirements as to coloring or discoloring are applicable to commercial pest control operations, and the interstate transportation of economic poisons in connection with such operations without complying with these requirements would constitute a violation of the act.

§ 162.101 Interpretation of terms included in definition of economic poison.

(a) *Definition of economic poison.* Under section 2a of the Act the term "economic poison" means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any insects, rodents, nematodes, fungi, or weeds, or any of the other forms of life declared to be pests in § 162.25; and any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant.

This includes all preparations intended for use as insecticides, rodenticides, nematocides, fungicides, herbicides, amphibian and reptile poisons or repellants, bird poisons or repellants, fish poisons or repellants, mammal poisons or repellants, invertebrate animal poisons or repellants, plant regulators, plant

defoliants, and plant desiccants, as described below.

(1) *Insecticides.* The term "insecticide" as defined in the Act includes all preparations intended for preventing, destroying, repelling, or mitigating any member of the Class Insecta or allied classes in the Phylum Arthropoda, for example products intended for use against beetles, bugs, bees, flies, spiders, mites, ticks, centipedes, or wood lice, in any environment whatsoever, including preparations intended for use on or in living man or other animals.

For convenience of reference all preparations intended for preventing, destroying, repelling, or mitigating other classes of invertebrates in the Phylum Arthropoda, declared to be pests in § 362.25, will also be identified in the administration of the Act as "insecticides."

(2) *Rodenticides.* The term "rodenticide" as defined in the Act includes all preparations intended for preventing, destroying, repelling, or mitigating animals belonging to the Order Rodentia of the Class Mammalia, such as rats, mice, gophers, and porcupines, and closely related species such as rabbits and hares.

(1) Rodenticides include, but are not limited to:

(a) Products intended for use as baits, tracking powders, or fumigants to kill or repel rodents; and

(b) Products intended for use on plants, in premises, or on or in packaging or other materials such as food containers, plastic pipe, telephone cables, and building materials, to repel rodents.

(i) The Act defines "rodenticide" to include also any substances or mixture of substances intended for preventing, destroying, repelling, or mitigating other vertebrate animals declared to be pests in § 162.25 but for convenience of reference such products will be identified in the administration of the Act as provided in subparagraphs (6), (7), (8), and (9) of this paragraph.

(3) *Nematocides.* The term "nematocide" as defined in the Act includes all preparations intended for preventing, destroying, repelling, or mitigating any invertebrate animals in the Class Nematoda of the Phylum Nemathelminthes, inhabiting soil, water, plants or plant parts.

(1) Nematocides include, but are not limited to:

(a) Products intended for use in controlling such nematodes in soil and in or on plants or plant parts (including foliage, roots, stems, flowers, and seeds);

(b) Products intended for use in controlling such nematodes on inanimate surfaces; and

(c) Products intended for use as space fumigants to control such nematodes on or in the commodities or articles being fumigated.

(i) Products intended for use in controlling nematodes in or on living man or other animals are not considered to be economic poisons under the Act.

(4) *Fungicides.* The term "fungicide" as defined in the Act includes all preparations intended for preventing, destroying,

repelling, or mitigating any fungi. The term "fungi" includes all such organisms as rusts, smuts, mildews, molds, yeasts, and bacteria, except those on or in living man or other animals. For convenience of reference all preparations intended for preventing, destroying, repelling, or mitigating viruses (other than those on or in living man or other animals), declared to be pests in § 162.25, will also be identified in the administration of the Act, as "fungicides."

(1) Fungicides include, but are not limited to:

(a) Products intended for use as seed or plant treatments to destroy or prevent fungus diseases;

(b) Products intended for use in disinfecting premises or inanimate objects to prevent or destroy pathogenic organisms which cause diseases of man or other animals;

(c) Products intended for use in reducing bacteria count in water or air; and

(d) Products intended for use as wood preservatives which prevent rot or decay in wood by preventing or destroying organisms which cause decay or rot.

(11) Products not considered to be fungicides include:

(a) Products intended for use in preventing or destroying fungi or viruses on or in living man or other animals; and

(b) Paints which are treated to protect the paint itself and bear no claims for protecting painted surfaces or other objects by preventing or destroying fungi.

(5) *Herbicides*. The term "herbicide" as defined in the Act includes all preparations intended for preventing, destroying, repelling, or mitigating plants which grow where they are not wanted. For convenience of reference, products for preventing, destroying, repelling, or mitigating the growth of weed parts, declared to be pests in § 162.25, will also be identified as herbicides in the administration of the Act.

(1) Herbicides include, but are not limited to:

(a) Products intended for use in killing, destroying, or mitigating weeds or weed parts by direct contact;

(b) Products intended for use as soil treatments for destroying, or preventing growth of weeds or weed parts including those which prevent the germination of weed seed;

(c) Products intended for use in killing or preventing the growth of plant roots in drainage tiles and sewers; and

(d) Products intended for use in killing or preventing the growth of algae or any other aquatic weeds.

(11) Desiccants and plant regulators are not considered to be herbicides.

(6) *Amphibian and reptile poisons or repellents*. The term "amphibian and reptile poisons or repellents" as used in this part includes all preparations intended for preventing, destroying, repelling, or mitigating amphibians and reptiles declared to be pests in § 162.25, for example:

(1) Products intended for use in baits or sprays for killing or repelling poisonous snakes.

(7) *Bird poisons or repellents*. The term "bird poisons or repellents" as used in this part includes all preparations intended for preventing, destroying, repelling, or mitigating birds declared to be pests in § 162.25.

(1) Bird poisons or repellents include, but are not limited to:

(a) Products applied to perches, tree branches, or similar places to kill birds when absorbed through the feet;

(b) Products applied to areas for the purpose of killing, repelling, or otherwise preventing the concentration of undesirable birds such as crows, blackbirds, etc; and

(c) Products applied around airports, grain fields, or similar areas to control birds.

(11) Instruments to repel birds by high frequency sound are not considered to be economic poisons, but are devices under the Act.

(8) *Fish poisons or repellents*. The term "fish poisons or repellents" as used in this part includes all preparations intended for preventing, destroying, repelling, or mitigating fish declared to be pests in § 162.25.

(1) Fish poisons or repellents include, but are not limited to:

(a) Products intended for use in repelling sharks or other fish; and

(b) Products intended for killing trash fish in ponds.

(11) Products intended for use in controlling amphibians, reptiles, or aquatic mammals are not considered to be fish poisons or repellents.

(9) *Mammal poisons or repellents*. The term "mammal poisons or repellents" as used in this part includes all preparations intended for preventing, destroying, repelling, or mitigating mammals declared to be pests in § 162.25.

(1) Mammal poisons or repellents include, but are not limited to:

(a) Products intended for use in protecting persons, beneficial animals, plants, structures, or premises from injury by dogs, cats, moles, bats, wild carnivores, armadillos, or deer.

(11) Rodenticides are treated separately under subparagraph (2) of this paragraph.

(10) *Invertebrate animal poisons or repellents*. The term "invertebrate animal poisons or repellents" as used in this part includes all preparations intended for preventing, destroying, repelling, or mitigating aquatic and terrestrial invertebrates declared to be pests in § 162.25, not including insecticides and nematocides.

(1) Invertebrate animal poisons or repellents include, but are not limited to:

(a) Products intended for use on boat and ship bottoms, piers, docks, and other structures to prevent damage by invertebrate animals such as teredos; and

(b) Products intended for use in destroying or repelling slugs or snails.

(11) Products, other than insecticides under subparagraph (1) of this paragraph, intended for use in controlling or

killing parasites on or in living man and other animals are not considered to be economic poisons under the Act.

(11) *Plant regulators*. The term "plant regulator" as defined in the Act includes all preparations intended for altering the behavior of ornamental or crop plants or the produce thereof through physiological rather than physical action.

(1) Plant regulators include, but are not limited to:

(a) Products intended for accelerating or retarding the rate of growth or maturation of plants;

(b) Products intended for enhancing fruit set, thinning flowers, or preventing fruit drop;

(c) Products intended to prolong or break dormancy of plants or the produce thereof; and

(d) Products intended for accelerating root formation and elongation.

(11) Products intended for use as fertilizers or plant nutrients, or for use in altering the behavior of plants through physical action such as sprays which form a vinyl coating, are not considered to be plant regulators.

(12) *Defoliants*. The term "defoliant" as defined in the Act includes all preparations intended for causing leaves or foliage to drop from plants.

(1) Defoliants include, but are not limited to:

(a) Products intended for use in causing leaves to drop from crop plants such as cotton, soybeans, or tomatoes, usually to facilitate harvest.

(11) Products not considered to be defoliants include:

(a) Herbicides; and

(b) Desiccants intended for use in causing leaves to dry but not drop from plants.

(13) *Desiccants*. The term "desiccant" as defined in the Act includes all preparations intended for artificially accelerating the drying of plant tissues.

(1) Desiccants include, but are not limited to:

(a) Products intended for use in accelerating the drying of crop plant parts such as cotton leaves, potato vines, or tobacco suckers, or debarking trees.

(11) Herbicides intended for use in destroying weeds by drying, and defoliants are not considered to be desiccants.

(b) *Status of products as economic poisons*. (1) A substance or mixture of substances is or is not an economic poison depending upon the purposes for which it is intended. Determination of intent in the marketing or distribution of these products is therefore of major importance. This determination will depend upon the facts in the particular case which tend to show the intended use of the product. In general, if a product is marketed in a manner that results in its being used as an economic poison, it is considered to be the intended result. Such intentions may be either expressed or implied. It is assumed that the distributor is aware of the purposes for which his product will be used.

(1) A product will be considered to be an economic poison if:

(a) The label or labeling of the product bears claims for use as an economic poison;

(b) Claims or recommendations for use as an economic poison are made in collateral advertising such as publications, advertising literature which does not accompany the product, or advertisements by radio or television; or

(c) Claims or recommendations for use as an economic poison are made verbally or in writing by representatives of the manufacturer, shipper, or distributor of the product.

(1) When all or most of the uses of a product are for economic poison purposes, it will be considered to be intended for use as an economic poison unless other intentions are clearly defined. Examples of products in this category are: pyrethrum concentrates, lead arsenate, calcium arsenate, DDT, toxaphene, pentachlorophenol, quaternary ammonium solutions, warfarin, pival, 2,4-D, and captan.

(2) A product shall be deemed to be an economic poison regardless of whether intended for use as packaged or after dilution or mixture with other substances such as water, kerosene, talc, clay, fertilizers, baits, or other carriers, solvents, diluents, or propellants. Accordingly, products intended for use as economic poisons after reformulation or repackaging are economic poisons. However, products intended for use as economic poisons only after further chemical manufacturing or other extensive processing, such as grinding to dust form, shall not be deemed to be economic poisons, unless such substances are especially prepared for use as economic poisons, or labeled, represented, or marketed in channels of trade where they will presumably be purchased as economic poisons.

(3) Economic poisons include, but are not limited to:

(i) Products intended for use in large scale experimental tests when the user expects benefit in pest control. (Such products are subject to the "permit" provisions of the Act. See § 162.17.)

(ii) Products intended for use both as economic poisons and for other purposes. (Such products are subject to all provisions of the Act including section 2z(1) under which a product is misbranded if its labeling bears any statement which is false or misleading concerning any of its uses or in any other particular.)

(4) Products not considered economic poisons include:

(i) Deodorants, bleaching agents, and cleaning agents, which bear no claims for the control of any pests;

(ii) Embalming fluids;

(iii) Building materials, such as lumber, fiber boards, wallpaper paste, and paints, which have been treated to protect the material itself against any pest and which bear no claims for protection of other surfaces or objects;

(iv) Fabrics which have been treated to protect the fabric itself from insects, fungi, or any other pest, and which bear no claims for protection of other surfaces or objects;

(v) Fertilizers and other plant nutrients; and

(vi) Preparations intended only for experimental use to determine their value as economic poisons, or their toxicity or other properties, when the user expects no benefit in pest control.

(c) *Economic poisons which are also drugs.* A few products are used in such a manner as to make them subject to both the Federal Insecticide, Fungicide, and Rodenticide Act and the Federal Food, Drug and Cosmetic Act. Such products are usually classified as insecticides within the meaning of the Federal Insecticide, Fungicide, and Rodenticide Act and bear claims for use on or in living man or other animals. Examples of such products are preparations intended for use in controlling mites which cause mange, scabies, or itch on man or other animals, and preparations intended for use in controlling cattle grubs, bots, and other internal insect parasites of man or other animals. Fungicides which bear drug claims are also subject to both Acts.

To avoid conflict in the requirements under the Federal Insecticide, Fungicide, and Rodenticide Act and the Federal Food, Drug and Cosmetic Act with respect to products which are covered by both Acts, close liaison is maintained between the Pesticides Regulation Division and the Food and Drug Administration.

§ 162.102 Interpretation with respect to names of products.

(a) *Permissible names.* (1) The act does not prohibit the use of any name for an economic poison which is not false or misleading in any particular.

(2) Names which give clear, non-misleading information as to the composition of the product are permissible. Thus the names "standard lead arsenate," "lime sulfur solution," "pyrethrum powder and lead arsenate," "sodium salt of 2,4-D," "bordeaux mixture," "nicotine dust" and "paris green" may be used for the products mentioned. If a product contains two or more ingredients, it is permissible to name only one of the ingredients if the ingredient named is present in sufficient proportion itself to make the product effective for the purposes for which it is intended and if the name clearly indicates the presence of other constituents; or if the ingredient is present in sufficient proportion to be of value and its percentage is clearly shown in the name. Examples of acceptable names of this type are "Brown Rat Killer with Antu," "5% Antu for brown rats," or "Antu 5% for brown rats," for a preparation containing 5% antu; "5% nicotine dust" or "Dust containing nicotine" for a preparation containing 5% nicotine and recommended for uses where this amount of nicotine is an adequate control; "1% DDT spray" (but not "spray containing DDT") for a preparation containing DDT among other constituents but insufficient DDT to be effective in and of itself for all of the purposes for which the product is intended.

(3) If a product consists of a principal active ingredient together with other ingredients which may be either active or inert and the principal active ingredient is present in sufficient amount to be effective for all of the purposes for which the product is intended, it may bear the name of the principal active ingredient followed by the term "dust," "spray," "mixture," "insecticide," "fungicide" or similar term, in type of equal prominence, without other qualification. However, if this form of name is used, the ingredient statement following the first option and, in case of use of such terms as "insect killer," the types of pests to be controlled must appear prominently on the front panel of the label.

Examples: Nicotine dust
Rotenone dust
DDT spray

(b) *Conditions under which a name is considered to be false or misleading.* (1) A descriptive or partially descriptive name may be false or misleading by reason of its giving a wrong impression of the composition of the product. This may be done in a number of ways. For example, (i) the product may consist of several ingredients but the name may specify only one of them, thus giving the impression that the product consists of only the one ingredient; (ii) the lettering used in the name of the product indicating the presence of one of the ingredients may be in large type or in a different color than the rest of the name so that it is unduly emphasized; or (iii) an ingredient mentioned in the name may be present in such a small amount that it is of no practical value in the product.

(2) A name may also be false or misleading because it claims or implies effectiveness for the product which it does not possess. Claims may be false because the name contains a direct misstatement as, for example, "roach killer" for a product which does not kill sufficient roaches to be an adequate control for them, or "moth repellent" for a preparation which is not repellent to moths, or they may be objectionable because they are too broad. Examples of objectionable broad names when used without qualification are "Insect Killer" for a household insecticide consisting of pyrethrum extract and deodorized kerosene; "Ant Killer" for a preparation which will attract and kill only sweet-preferring ants; "Rat Killer" for a preparation dependent upon antu for its effectiveness; and "Weed Killer" for a preparation dependent upon 2,4-D for effectiveness. The false impression created by such names as these can frequently be overcome by naming the pests to be controlled, prominently and in close proximity to the name of the product on the front panel of the label, as, for example, "5% Antu Rat Killer for brown rats" or "Insect Killer for flies, mosquitoes, roaches and bedbugs," assuming, of course, that the product is effective for the pests named. In the case of products sold as "Weed Killer containing 2,4-D," "Insect Spray" or "Insect Dust," the names of the particular weeds or insects to be controlled need not be contained

on the front panel of the label if they are placed prominently on the back panel, since it is believed that most users would not be misled by this procedure.

(3) A coined name may be misleading because it gives a misleading impression of the composition or the effectiveness of the product. Such names are as much in violation of the law as if the misleading impression were given by a direct statement. A name such as "Para-Camph" for a moth killer would indicate a mixture of paradichlorobenzene and camphor, the former being present in the larger amount. "Para-pur" would imply straight paradichlorobenzene. The use of variations of the terms "sterile" in the name of a disinfectant is likely to imply sterilization.

(c) *Names registered as trade-marks.* In determining whether or not to register a trade-mark, the Patent Office makes no determination of its legality under the Federal Insecticide, Fungicide and Rodenticide Act. Therefore, such registration cannot be accepted as evidence that a name is legal under the act. If a name is false or misleading, it is in violation of the act whether or not it has been registered as a trade-mark. Sometimes the misleading impression can be overcome by clearly and prominently indicating in the name that the name is only a brand name and by clearly stating the limitations of the product.

§ 162.103 Interpretation with respect to ingredients and ingredient statements.

(a) *Labels must bear ingredient statements.* (1) The label of each economic poison must bear either:

(i) A statement of the name and percentage of each active ingredient and the total percentage of the inert ingredients, or

(ii) A statement of the names of each of the active ingredients in the descending order of the amount of each present, followed by a statement of the names of each of the inert ingredients, if any, in the descending order of the amount of each, and the total percentage of the inert ingredients.

(2) If the economic poison is highly toxic to man, the first form of ingredient statement must be used.

(3) In addition to one of the above forms of ingredient statement the label of an economic poison containing arsenic must state the percentages of total and water soluble arsenic, each calculated as elemental arsenic.

(4) The active ingredients must be designated by the term "active ingredients" and the inert ingredients by the term "inert ingredients," or the singular forms of these terms when appropriate. These terms shall be in the same size type and equally prominent. It is preferable, but not required, that these designations be set over well to the left, and that the names of the ingredients be indented.

(5) In the ingredient statement for a product which contains 100 percent of active ingredients, the statement "Inert ingredients, none" is not required.

(6) Unless the ingredient statement is a complete analysis of the economic poison, the term "analysis" should not be used as a heading for the ingredient statement.

(b) *Definition of "ingredient."* (1) Ingredients are the simplest constituents of the economic poison which can reasonably be determined and reported. A mixture of ingredients is not to be reported as a single ingredient except in those cases where it is not practical to separate them. A solution is a mixture of ingredients, and not a single ingredient.

(2) In the case of the simpler economic poisons which consist of mixtures of readily determinable chemical compounds, the actual compounds present are the ingredients. For example, the following are ingredients of economic poisons: lead arsenate, copper sulfate pentahydrate (in blue vitriol), copper sulfate monohydrate, tricalcium arsenate, copper acetoarsenite (in paris green), water, ethyl alcohol, sulfur, alpha naphthylthiourea, and sodium salt of 2,4-dichlorophenoxyacetic acid. It should be borne in mind that the compounds present in the economic poison may differ from those put into it. When copper sulfate pentahydrate, for example, is dissolved in water, the result is a solution of copper sulfate. The water of crystallization will have become merely water of solution, and will no longer be part of the active ingredient. When sodium hydroxide (lye) and fatty acids are added together in suitable proportions, the result is soap.

(3) In the case of the more complex economic poisons, it may not be practical to determine the actual chemical compounds present. In such cases, the statement of ingredients as actual compounds is not feasible, and some other method of statement which will be both practical and informative to the purchaser must be used. Examples of this type of ingredient are kerosene, tobacco other than nicotine (for the inert portion of powdered tobacco), and copper (stating the form in which it is present) in indefinite compounds such as basic copper carbonate or basic copper sulfate.

(4) If the manufacturer is in doubt as to what constituents of his economic poison are to be considered ingredients, he may furnish the Pesticides Regulation Division full information as to its formulation, the results of chemical analysis and any other pertinent data, and the Division will aid him insofar as possible to determine which constituents should be considered ingredients.

(c) *Active ingredients.* (1) The active ingredients of an economic poison are those which are capable, in themselves, of preventing, destroying, repelling, or mitigating insects, fungi, rodents, weeds, or other pests when used in the same manner and for the same purposes as those for which the economic poison is intended. An ingredient which is antagonistic to the activity of the principal active ingredients cannot be considered active because it actually de-

creases the effectiveness of the economic poison.

(2) If an ingredient is present in such a small proportion that it does not add materially to the effectiveness of the product, it is misleading to name it as an active ingredient.

(3) If an economic poison is intended for two or more economic poison purposes (for example, as a combined insecticide and fungicide), each of the ingredients which is active for one or more of the intended economic poison uses shall be considered as an active ingredient.

(4) The Director may require an ingredient to be designated as an active ingredient if, in his opinion, it sufficiently increases the effectiveness of the economic poison to warrant such action. Sesamin, which is not itself an effective insecticide, but which greatly increases the effectiveness of pyrethrins in deodorized kerosene, is considered an active ingredient in such mixtures.

(d) *Inert ingredients.* All ingredients which are not "active" as defined in the preceding section are inert within the meaning of the law. This includes the following types of ingredients (except when they have economic poison effectiveness of their own): solvents such as water; baits such as sugars, starches, meat scraps, etc.; dust carriers such as talc and clay; fillers; wetting and spreading agents; propellants in aerosol dispensers; emulsifiers; and other. The fact that these ingredients are necessary in the practical application of the economic poison does not make them active ingredients.

(e) *Position of ingredient statement.*

(1) The ingredient statement is, in general, required to appear on that part of the immediate container of the retail package which is presented or displayed under customary conditions of purchase—that is, on the front panel. If there is an outside container or wrapper through which the ingredient statement cannot be clearly read, the ingredient statement must also appear on such outside container or wrapper.

(2) If the size or form of the package makes it impractical to place the ingredient statement on the front panel of the label, permission may be granted for the ingredient statement to appear on some other panel of the label. If the package contains not more than one pound of a solid or one pint of a liquid, the ingredient statement may appear on the side or back panel.

(3) In case the ingredient statement is unusually long, permission may be granted to place it on a side or back panel of packages containing not more than 2½ pounds of a solid or 3 pints of a liquid.

(f) *Prominence of the ingredient statement.* (1) The ingredient statement must be placed prominently on the label and with such conspicuousness as to render it likely to be read by the ordinary individual under customary conditions of purchase. To fulfill this requirement the statement must:

(1) Run parallel with the other printed matter on the panel on which it appears; and

(ii) Be on a clear contrasting background; and

(iii) Not be obscured or crowded—that is, it must have a reasonable amount of clear space around it and not be placed in the body of reading matter; and

(iv) Be in type large enough so that it is likely to be read. It is not possible to state a minimum size of type which will be applicable to all packages. In general, the type used should be at least as large as that used for the directions or other wording in close proximity to the ingredient statement. In some cases, it may have to be larger to achieve the requisite prominence. In any case it should be large enough to be easily read by an individual with normal eyesight without the aid of glasses.

(g) *Names to be used in the ingredient statement.* (1) It is the purpose of the act that the names used in the ingredient statement shall be as informative as possible to the persons purchasing the economic poison and other interested persons, such as official advisors as to the use of economic poisons (county agents, extension entomologists, plant pathologists, agronomists, and rodent control officials), and to physicians when necessary for the preparation of antidotes. The name used for the ingredient shall be the well-known common name, if there is such a name. If there is no common name, and the chemical name is known, it should be used when it will be properly informative. A trade-mark or trade name may not be used as the name of an ingredient except when it has become a common name.

(2) In many cases there is no well-known common name and no chemical name. In such cases, the name used for the ingredient should be as informative as possible. It may be a descriptive name, such as derris resins or tobacco other than nicotine.

(3) In some cases where there is no common name, the chemical composition may be unknown or so complex that use of the chemical name would not be practical. In such cases, the Director may permit the use of a new or coined name for the ingredient if this will simplify the ingredient statement and not hide information.

(i) A new or coined name will normally refer to a single chemical compound, or at least to a definitely defined material. Its adoption usually entails discussion with interested groups, such as representatives of the chemical, entomological, medical, and plant pathological scientific groups, as well as with the manufacturers of the material. The purpose is to obtain a name which is easy to use and informative to the public. The new or coined name must not be covered by private trademark and must be free for general use.

(ii) Since new or coined names will not be common names when first used,

they should at first be accompanied by the chemical or other descriptive name of the ingredient. As an example, if a new or coined name were adopted for a chemical which was the only active ingredient in an economic poison, the ingredient statement would be in the following form:

Active ingredient:	Percent
Coined name ¹	
Inert ingredients.....	
Total.....	100

¹ Consists of (full name of chemical compound).

It is necessary to include the name of the compound since cases of poisoning may occur and the coined name alone will not be sufficiently informative for the attending physician.

(h) *Statement of percentages.* (1) The percentages of ingredients shall be stated in terms of weight. Statements in terms of percentage by volume or on a so-called "Weight-volume" basis do not fulfill the requirements of the law, but may be used as additional statements, if they will be informative to the purchaser and not misleading. For example, in addition to the ingredient statement in terms of percentage by weight, the label of a DDT solution in kerosene may bear a correct statement such as "Contains ___ oz. of DDT per gallon of product," the correct value to be inserted in the blank space. In many cases such a procedure is desirable.

(2) The sum of the percentages of the active and the inert ingredients shall be 100.

(3) Sliding scale forms of percentage statements, such as "22-25", shall not be used.

(i) *Accuracy of statement of percentages.* (1) The percentages given for the active and inert ingredients should be as nearly correct as possible in good manufacturing practice. In case there is a small unavoidable variation in the percentage of the active ingredients in different batches of an economic poison, the value stated shall be the lowest percentage of the active ingredient which may be present, so that the purchaser can always depend upon receiving a product of at least the strength promised him. However, the variation above the value stated should not be unreasonably large. Actual figures for permissible variation will depend upon the facts in the particular case. Percentages should not be stated to a greater degree of accuracy than the facts warrant.

(2) Inert impurities which are present in substantial amounts in active ingredients, are to be considered as inert ingredients in the ingredient statement. If the impurities are present in less than substantial amounts and their presence does not reduce the effectiveness of the product, their presence may be neglected. What constitutes substantial amounts will depend upon the special circumstances in the particular case, but, as a general rule, if the total proportion of impurities in the product is less than one percent and if they do not

substantially reduce the effectiveness of the product, they may be neglected. Thus a technical sodium fluoride containing 95 percent of actual sodium fluoride and 5 percent of sodium chloride, sodium sulfate, and sodium carbonate would be required to declare the 5 percent of inert ingredients but a boric acid containing 99.1 percent of actual boric acid could be considered as consisting entirely of boric acid.

(j) *Economic poisons which deteriorate.* (1) Economic poisons must be effective for the purposes intended and have the proportions of active ingredients claimed as long as they are subject to the act.

(2) If the product is one which loses strength on standing, this should be taken into account in preparing the ingredient statement and marketing the product. In such cases, the product should be marketed in such a way that it will all be used before appreciable deterioration has taken place, or allowance should be made for deterioration of the product in preparing the ingredient statement. For example, if an economic poison will lose 10 percent of its strength in six months, its ingredient statement may show the strength that it will have at the end of six months, and then it may be marketed so that it will all be used up by that time. However, it must be effective for the purposes claimed even at the lower strength.

(3) If the product is one which is intended to attract insects or rodents and will lose its attractiveness after a time, it should not be marketed after that time. A prominent statement, "Not to be used after _____" is allowable.

(Date)

(k) *Acceptable forms of ingredient statement.* Some acceptable forms of ingredient statement follow: (1) For commercial calcium arsenate and other calcium compounds:

Active ingredient:	Percent
Tricalcium arsenate.....	
Inert ingredients.....	
Total.....	100
Total arsenic calculated as elemental arsenic, _____%. Water-soluble arsenic calculated as elemental arsenic not more than _____%.	

(2) For bordeaux mixture:

Active ingredient:	Percent
Copper (in bordeaux mixture).....	
Inert ingredients.....	
Total.....	100

(3) For fly spray containing pyrethrum extract and deodorized kerosene:

Active ingredients:	Percent
Pyrethrins.....	
Petroleum distillate.....	
Total.....	100

or

Active ingredients:	Percent
Petroleum distillate.....	
Pyrethrins.....	
Total.....	100

(4) For pine oil disinfectant made of pine oil, soap, and water:

Active ingredients:	Percent
Pine oil.....	-----
Soap.....	-----
Inert ingredients.....	-----
Total.....	100

or

Active ingredients:	Percent
Pine oil.....	-----
Soap.....	-----
Inert ingredient, water.....	-----
Total.....	100

(5) For brown rat bait consisting of alpha naphthyl thiourea (Antu) and bait materials:

Active ingredient:	Percent
Alpha naphthyl thiourea.....	-----
Inert ingredients.....	-----
Total.....	100

(6) For a weed killer containing the sodium salt of 2,4-dichlorophenoxyacetic acid (2,4-D):

Active ingredient:	Percent
Sodium salt of 2,4-dichlorophenoxyacetic acid ¹	-----
Inert ingredients.....	-----
Total.....	100

¹Equivalent to 2,4-dichlorophenoxyacetic acid, -----%.

The correct values for the percentages should in each case be inserted in the blank spaces.

§ 162.104 Interpretation with respect to statement of net contents.

(a) *Requirement of the act.* The act requires that the label of each economic poison bear a statement of the net weight or measure of the contents.

(b) *Terms of weight or measure.* (1) If there are terms of weight or measure in general use for a particular economic poison which will give accurate information to users as to the quantity of content, such terms shall be used on the label.

(2) When there is no general usage in the trade with respect to the terms of weight or measure of a particular economic poison, the content must be stated in terms of liquid measure if the product is a liquid, and in terms of weight if it is a solid, semisolid, viscous, or a mixture of liquid and solid.

(i) Liquids include all substances which flow freely like water and thus can be readily measured. Oils of low viscosity such as kerosene, creosote oil and pine oil are liquids. Emulsions with low viscosity are liquids, but emulsions of high viscosity such as mayonnaise, or viscous tars are not liquids within the meaning of this definition.

(ii) The terms solid, semisolid, viscous and mixture of liquid and solid include all products other than liquids.

(3) Statements of liquid measure must be in terms of the United States gallon, quart, pint and fluid ounce at 68° F.; statements of weight must be in terms of avoirdupois pound and ounce.

(4) Some liquid economic poisons are usually sold by weight. Examples are

nicotine sulfate solution containing 40 percent of nicotine and U. S. P. formaldehyde solution. The content of these liquid economic poisons must be stated in terms of weight.

(5) In a few cases economic poisons are sold in gelatine capsules and the contents of such capsules stated in terms of fluid drams. Where such usage has been general, the net content must be given in terms of the number of capsules each containing a stated number of fluid drams.

(6) Some disinfectants are made up in tablet form. When so prepared, objection will not be raised to giving the number of tablets and the weight of each.

(c) *Units of weight or measure.* Statements of net content must be in terms of the largest unit present, but in the case of added fractions of the largest unit, the fractional portion may be expressed in terms of a smaller unit. Thus, 3½ pounds may be stated as "3½ pounds" or "3 pounds, 8 ounces"; 5½ gallons may be stated as "5½ gallons" or "5 gallons, 2 quarts"; ¾ quarts may be stated as "¾ quarts," "¾ quarts, 1½ pints," or "¾ quarts, 1 pint, 8 fl. oz." It is not permissible to state net contents such as 128 fluid ounces, 32 fluid ounces, 6 pints, 8 quarts, or 24 ounces since in each case the statement is not in terms of the largest unit present.

(d) *Permissible variations.* (1) If the contents are stated as a minimum quantity, the package must contain at least the quantity claimed. No variation below this quantity is permitted and any variation above the contents stated must not be unreasonably large.

(2) The net content is considered to be the average net content unless stated as a minimum quantity. Where average net content is used:

(i) The average content of the packages in any shipment must not fall below the quantity stated and variation above the quantity stated is permitted only to the extent that it represents deviations unavoidable in good packing practice.

(ii) There must be no unreasonable variation from the average in the content of any package.

(e) *Allowance for loss.* A statement of net content "when packed" does not comply with the requirements of the act. The statement must be such that it will be correct as long as the economic poison is subject to the law. Thus, if a product such as borax may lose weight by drying out when stored in paper bags, it must be packed and labeled in such a way that the statement of net content will be correct when the product is purchased.

(f) *Location and prominence of net content statement.* (1) The net content statement must appear on the label of the container. It is not required to appear on the front panel of the label but it must be prominently placed with such conspicuousness as to render it likely to be read by the purchaser under customary conditions of purchase and use. In the case of drums or bags the net con-

tent may be plainly and conspicuously stenciled on the drum or bag. If a single label is printed for use on several different sizes of containers, the net content may be plainly inserted on each label with a rubber stamp or by any other methods which gives the information clearly.

(2) When the retail package contains smaller unit packets as, for example, for single doses, the net contents must appear on the retail package but need not appear on the individual packets. Thus, if a rodenticide is made up into individual baits enclosed in cellophane, and these baits are packed in a retail package, the net contents should be shown on the retail container but need not be shown on the individual baits. However, if the individual baits are at any time marketed separately, they must bear the net content statement as well as other required information.

§ 162.105 Interpretation of requirements with respect to directions for use.

(a) *Requirements of the Act.* The Act and the regulations require that every economic poison which is subject to their provisions must be properly labeled including directions for use which may be necessary and, if complied with, adequate to protect the public.

(b) *Contents of directions.* The extent of detailed information required in the directions for use will vary, depending upon the nature of the proposed use, general knowledge of the economic poison and its uses, and possible hazards involved. In general, directions should include:

(1) The site of application of the economic poison including such factors as the crops, animals, areas, or objects to be treated;

(2) The rate of application to each site;

(3) Instructions on timing applications to obtain best results and to avoid adverse effects;

(4) Any necessary limitation or restriction such as the time required between application and harvest of food crops, warning against use on certain crops, animals, objects, or in certain areas; and

(5) Any other pertinent information which in the opinion of the Director is necessary for the protection of the public.

(c) *When directions are required.* Directions for use are required whenever they are necessary for the protection of the public. The public includes all persons who may be affected by the handling, storage, or use of the economic poison. Directions for use are necessary in the labeling of all products which are sold for use as economic poisons with the following exceptions:

(1) Detailed directions for use may be omitted from the labeling of well known economic poisons which are sold in containers of 100 pounds or more of a solid intended primarily for use undiluted, 50 pounds or more of a solid intended primarily for use after dilution, 55 gallons

or more of a liquid intended primarily for use undiluted, or 20 gallons or more of a liquid intended primarily for use after dilution; *Provided:*

(i) There is readily available general knowledge of the composition, methods of use, and effectiveness of the product for economic poison purposes;

(ii) Option 1 of the ingredient statement is followed; and

(iii) In the opinion of the Director, such directions are not necessary for the protection of the public.

(2) Detailed directions for use may be omitted from the labeling of economic poisons (as defined in Interpretation 3, Revision I) which are intended for use only by manufacturers of products other than economic poisons in their regular manufacturing processes; *Provided:*

(i) Option 1 of the ingredient statement is followed;

(ii) The label clearly shows that the product is intended for use only in manufacturing processes;

(iii) Adequate information such as technical data sheets or bulletins is available to the trade specifying the type of pesticide involved and its proper use in manufacturing processes;

(iv) The economic poison will not come into the hands of the general public except after incorporation into such finished products; and

(v) In the opinion of the Director, such directions are not necessary for the protection of the public.

Detailed directions for use are not considered necessary in such cases since such uses are highly specialized and usually well-known to the manufacturer. Examples of such products would be those intended for use during the manufacturing processes in treating leather, wool, other fabrics, paints, building materials, and other materials for protection against any pest.

(3) Detailed directions for use may be omitted from the labeling of economic poisons for which sale is limited to physicians, veterinarians, or druggists; *Provided:*

(i) Option 1 of the ingredient statement is followed;

(ii) The label clearly states that the product is for use only by physicians or veterinarians, or for use as prescribed by physicians or veterinarians; and

(iii) In the opinion of the Director, such directions are not necessary for the protection of the public.

An example of such products would be benzyl benzoate to be used by, or its use prescribed by physicians or veterinarians for use against the itch mite or mange mite.

(4) Detailed directions for use may be omitted from the labeling of economic poisons which are intended for use only by distributors or formulators in preparing economic poisons for sale to the public; *Provided:*

(i) Option 1 of the ingredient statement is followed;

(ii) There is readily available to the trade, information on the composition, toxicity, methods of use, applicable re-

strictions or limitations, and effectiveness of the product for economic poison purposes;

(iii) The label clearly states that the product is intended for use only in manufacturing, formulating, mixing, or repackaging for use as economic poisons; and

(iv) In the opinion of the Director, such directions are not necessary for the protection of the public.

Examples of such products are 50 percent DDT and concentrated 2,4-dichlorophenoxyacetic acid intended for use by distributors or formulators in preparing economic poisons of a lower concentration for sale to the public.

(d) *Where directions shall appear.* The directions for use shall appear on the labeling of the economic poison. The labeling includes the label which is affixed to the product plus all printed or graphic matter which accompanies the product at any time. Directions for use may appear on the label or on accompanying leaflets or circulars.

(1) Directions for use may be placed on any part of the label; *Provided:*

(i) They are conspicuous enough to be easily read by the user of the economic poison.

(2) Directions for use may appear on printed or graphic matter which accompanies the economic poison; *Provided:*

(i) Such printed or graphic matter is securely attached to each package of the economic poison, or placed within the outside wrapper or bag, so that it will not under normal condition be lost during shipment, storage, or handling.

(ii) The label bears a reference to the directions for use on accompanying leaflets or circulars, such as "See directions on the enclosed circular," and

(iii) In the opinion of the Director it is not necessary for such directions to appear on the label.

(e) *Adequacy and clarity of directions.*

(1) Directions for use must be stated in terms which can be easily read and understood by the average person likely to use the economic poison. Directions must be adequate when carefully followed, to protect the public from economic cheat and from personal injury or damage to property. This requires sufficient completeness to insure the proper use of the product so as to obtain the desired results in pest control without causing injury to man, beneficial animals, or beneficial plants. Directions need not be exhaustive in every case, since some of the common economic poisons are intended for use against a large number of pests. Frequently the methods of control in different parts of the country vary and they may vary in a single locality from year to year, depending on weather conditions. It would be manifestly impractical to include detailed directions for all uses on the labeling of many widely used economic poisons.

(2) The need for detailed directions for use will be greater on household or home garden products likely to be used by persons not well informed in the use of economic poisons than it will be in the

case of products intended for large scale agricultural or commercial uses. The large scale user is more likely to be informed of the properties of economic poisons and also to rely on local agricultural authorities for advice. The need for detailed directions is also greater in the case of new economic poisons, or those of unusual composition than it is in the case of older, well-known materials.

(3) The following general considerations apply:

(i) Directions for use of economic poisons which are likely to be applied by householders or small gardeners, cattle raisers, etc., shall be sufficiently detailed to give full information on usage. They must include methods of application, time of application, rate of application, dilutions, any necessary limitations or restrictions and when necessary they shall provide for repeated treatments. The directions for use shall be consistent with the warning or caution statements on the label.

(ii) Directions for use of well-known, standardized economic poisons which will be applied by professional pest control operators, may be more general in nature, giving sites of application, pests to be controlled, and rates and methods of application.

(iii) Directions for use of new or unusual economic poisons shall be given in full detail, since information or advice on the use of the product from other sources is not likely to be available.

(f) *Applicability of directions.* Directions for use in the labeling of economic poisons will be considered to apply in all parts of the country in which the product is marketed unless the labeling makes a direct statement to the contrary. It has been found that some pests are more easily controlled in certain parts of the country than in others. If an economic poison has a nationwide distribution, the directions for use should apply to all parts of the nation. However, if work by the State experiment stations in certain sections of the country shows, for example, that concentrations lower than those recommended in the labeling of the product will be effective against a certain pest in those particular sections than is required in other sections, objection is not raised to recommendation of the weaker dilution in the particular sections involved or to a reference to agricultural authorities in those sections for information as to usage there. If the product is marketed only in the sections where the weaker dilution has been found effective, the weaker dilution may be recommended without reference to the dilution required elsewhere. However, a statement to that effect must accompany the application for registration.

(g) *Broad claims.* The directions for use must not bear any false or misleading claims. Examples of broad claims, which are not acceptable in most cases, include the following:

(1) Broad references to insects, plant diseases, weeds, rodents, or a list of pests followed by the abbreviation "etc." which

are likely to be interpreted as implying that the product will kill or control any or all such pests. (Specific pests which the product will adequately control when used as directed, may be named and in some cases are required to be named.)

(2) Claims for extermination of insects, plant diseases, weeds, rodents, or other pests. (Claims for killing or controlling particular kinds of pests are acceptable and may be required if the product will give a reasonable control of such pests under the specified conditions of use.)

(3) Claims for sterilization in the case of germicides when the product will not kill resistant spores under the specified conditions of use.

(4) Claims implying effectiveness of the economic poison under all conditions of use if it is not effective under all such conditions. When a product is not effective under certain conditions, as for example, in the presence of dirt, at low temperatures, or in the presence of other chemicals, the directions should make it clear that such conditions are to be avoided.

(h) *Responsibility for claims.* The shipper or guarantor of an economic poison is responsible for the accuracy of all claims made for it, including those in the directions for use. Therefore, only those claims which have been proven to be accurate, in that effective pest control is accomplished without injury to living man, beneficial plants or beneficial animals, should appear in the directions for use.

§ 162.106 Interpretation with respect to registration requirements.

(a) *Products which must be registered.* (1) Registration is required for all economic poisons that are distributed, sold or offered for sale in the District of Columbia or the territories, shipped or delivered for shipment in interstate commerce, exported, or imported from abroad, except economic poisons which are intended solely for experimental use. (These, however, may be subject to the permit requirements of the law.)

(2) Custom mixes (special mixtures of economic poisons prepared on the order of and according to the specifications of the purchaser), are subject to the act and must be registered. When rush shipment of such mixtures is required, special attention will be given to expediting the registration. When requested, telegraphic notification of registration at the expense of the registrant will be given.

(b) *Products for which registration is not required.* (1) Economic poisons which are made and used in the same state without entering interstate commerce need not be registered under the act since they are not subject thereto. However, registration will not be denied them since it is possible they may be shipped out of the state.

(2) Economic poisons which are delivered for shipment to any foreign country need not be registered when they are prepared or packed in accordance with

the specifications or directions of the foreign purchaser.

(3) Registration will not be issued for devices or other products which are not economic poisons.

(c) *Who may register an economic poison.* (1) Any manufacturer, packer, seller, distributor, or shipper of an economic poison may register it.

(2) If the manufacturer of an economic poison ships it in interstate or foreign commerce or distributes it in the District of Columbia or the Territories, he will normally register it himself since it must be registered before such shipment or distribution. This is true whether the manufacturer ships it under his own label or under a label bearing the distributor's name.

(3) If the manufacturer sells to a distributor in the same state, the manufacturer may or may not register the product, but if he has not, registration by the distributor will be required before the product is shipped in interstate commerce.

(4) If a distributor has an economic poison made for him by two or more manufacturers following exactly the same formula and labeled with identical labels which bear his name as distributor but make no reference to the actual manufacturer, the distributor may register the product, obtaining a single registration to cover the material from all sources of manufacture. On the other hand, each manufacturer may register the product which he furnishes to the distributor, but in this case the manufacturer can register his own product only and it will be necessary for each manufacturer to have a separate registration.

(d) *The effect of registration.* (1) Registration is a device to bring the economic poison to the attention of the Environmental Protection Agency and to furnish an opportunity to correct obvious faults in labeling. It does not place the responsibility for correct labeling upon the Agency though the Agency does advise relative to revision of labeling, on the basis of available information. The shipper of the goods or the guarantor is responsible for the compliance of his labeling with legal requirements. Before placing the article on the market, he should have it thoroughly tested by experimenters competent to judge its effectiveness and make only such claims as are justified by the results of their tests. If it is likely to cause injury to human beings, or desirable plants or animals, its limitations from these standpoints should be determined and adequate cautions placed on the label. Determination should be made as to whether it is highly toxic within the meaning of the act and regulations and, if so, the label must bear the statements required with respect to highly toxic products. It is the purpose of the act to protect the public before injury occurs rather than to subject the public to the dangers of experimentation and take action only after injury has occurred.

(2) Registration is not to be understood as indicating the Environmental Protection Agency's approval or recommendation of the economic poison.

(3) Federal registration does not remove the requirements for state registration in those states which require registration.

(4) When the economic poison has been registered, no further registration under the act is required if the product is in the manufacturer's or registrant's original unbroken immediate container, and if the claims made for it and the directions for its use do not differ in substance from the representations made in connection with the registration.

(e) *Multiple products.* A single registration applies only to a single economic poison, that is, to a product having the same composition, usually manufactured by the same person, and the labeling of which is identical with and bears the same claims as those covered by the registration. If a single registration is to cover the same product sold under other trade names and bearing the names and addresses of the distributors, statements showing such other names and labels shall be filed with the Pesticides Regulation Division. Thus, when a manufacturer prepares an economic poison under a stock label which does not bear his name but on which he prints names of the product and names and addresses of distributors, who obtain the product from him, the manufacturer may register the product under his name and file an additional statement showing the trade names under which the product will be sold and the names and addresses which will appear on the label. These additional statements may be filed at any time before the goods become subject to the law.

(f) *Procedure for registration.* (1) Applications for registration should be sent to the Pesticides Regulation Division, Environmental Protection Agency, Washington, D.C. 20250. No fee is required. Application forms may be obtained from the Plant Pest Control Division by request. Applications should be submitted as far in advance as possible and at least 30 days before it is desired that the registration take effect. In special cases, the Agency will try to issue registrations in less than 30 days, but dependence should not be placed on obtaining registration in a shorter period except for real emergencies.

(2) As many products may be submitted for registration as desired with one application form. If there is not room on the form to name all of the products, their names may be continued on a separate plain sheet of paper attached to it.

(3) The blank spaces on the form should be filled in and the form signed by the proposed registrant or, if the registrant is a firm, by a responsible officer.

(4) With the filled-in application for registration there should be submitted two "data sheets" for each product which it is desired to register. The "data sheet" should be 8½ inches by 11 inches

in size. A sheet of heavy typewriter paper is satisfactory. On each data sheet should be clearly stated the name of the product, the name and address of the registrant and, if it does not appear on the label, a statement giving the name and percentage of each active ingredient in the product and any pertinent information about the inert ingredients. To each data sheet there should be attached a specimen of the label for the product and specimens of any leaflets, circulars, or other advertising material accompanying the product. If the same label, except for statement of net contents, is used for several sizes of the product, information as to the different sizes should be given and the label for only the smallest size need be submitted. All labels bearing different claims should be submitted. Before attaching the labels and other material to the "data sheet," the applicant should make sure that they include the required information which is as follows:

On the label:

- (i) The name and address of the manufacturer, registrant, or person for whom manufactured.
- (ii) The name under which the product is sold.
- (iii) The ingredient statement.
- (iv) The net weight or measure of content.
- (v) Any caution or warning statement which may be necessary and, if compiled with, will be adequate to prevent injury to living man and other vertebrate animals, and useful vegetation and invertebrate animals.
- (vi) In the case of highly toxic materials, the word "Poison" in red, the skull and crossbones and the antidote statement.

On the label, or on circulars, etc. accompanying the economic poison: Adequate directions for use when necessary for the proper use of the product.

(5) If the proposed registrant has doubt as to the legality of his labeling or proposed corrections for it, he may first submit a rough draft form for comment. After he has received the comment, he may revise and print the labeling and submit it in duplicate for registration.

(6) If the product is being recommended for any uses, or if any claims are being made for it, other than those on the labeling submitted, these should be shown on the data sheet. It is not desired, however, that the complete script of radio broadcasts, periodical advertising and other advertising material which does not accompany the economic poison be submitted.

(7) When the application is received in the Pesticides Regulation Division, it is examined to determine whether the composition of the product appears to be such as to warrant the proposed claims for it and whether the product, its labeling, and other material submitted appear to comply with the requirements of the act.

(8) If the information submitted is not sufficient to furnish a basis for action, the applicant may be asked to fur-

nish additional information such as the complete formula for the product and a full description of the tests upon which the claims for the product are based. If the article or its labeling does not appear to comply with legal requirements, the applicant is notified wherein it fails to comply and given an opportunity to make corrections.

(g) Effective period of registration.

(1) The registration becomes effective on the date that the notice of registration is issued.

(2) A registration extends for five years unless canceled for cause or at the request of the registrant.

(3) The Agency can, at any time, cancel a registration and issue a registration under protest, if such action is found necessary to protect the public.

(4) The Agency can cancel the registration of an economic poison at the end of five years following the registration or at the end of any five-year period thereafter, unless the registrant, prior to the expiration of the five-year period, requests that such registration be continued in effect.

(5) A registration will be cancelled at any time on request of the registrant.

(h) Changes in labeling or formulas.

(1) If changes in substance in the labeling of a registered product or changes in its formula are to be made, a statement of the contemplated changes must be submitted to the Agency in advance so that an amended registration or new registration may be issued, if such registration is justified.

(2) The statement should show or describe the exact changes to be made, describe any tests which justify the changes, and state the proposed effective date of the changes.

(3) The material submitted will be considered in the same manner as is an original submission. If new or amended registration appears justified, notification to that effect will be sent the registrant. Among reasons for which the new or amended registrations under the same name may be refused would be a reduction in strength or effectiveness of the product which would make it misleading to sell the new material under the old name.

(4) After the effective date of the new or amended registration the product shall be marketed only under the new claims or the new formula except that, upon request, a reasonable period of time may be allowed for the disposal of properly labeled old stocks. If the registrant desires to avail himself of this privilege, he should notify the Pesticides Regulation Division at the time of change of registration how much stock he has and when he expects it will be used up. Consideration will then be given to permitting its disposal.

(i) Registration under protest.

(1) If upon receipt of a notice that his economic poison does not appear to warrant the claims made for it or that the article or its labeling does not appear to comply with the provisions of the act, the proposed registrant insists that corrections are unnecessary and requests in writing

that it be registered as submitted, the economic poison shall be registered under protest. The notice of registration under protest will be accompanied by a warning in writing of the apparent failure to comply with the law.

(2) In the case of conviction for an offense concerning which he has been warned in connection with the issuance of a registration under protest, the act provides that the registrant shall be fined not more than \$1000 or imprisoned for not more than one year, or both fined and imprisoned, and the registration of the article shall terminate.

(3) Registration under protest should only occur when there is serious disagreement between the registrant and Agency officials concerning the efficacy of, or labeling required for, an economic poison. Disagreements may in some cases be due to misunderstandings as to requirements. When they arise, it is the purpose of the Agency to cooperate with the proposed registrant in an attempt to clear them up. It appears desirable that registration under protest be requested and issued only as a last resort.

§ 162.107 Interpretation with respect to advertising.

(a) Requirements of the Act. Section 3(a) of the Act prohibits interstate shipment or distribution of an economic poison if any of the claims made for it or any of the directions for its use differ in substance from the representations made in connection with its registration. This includes any representations made by the manufacturer or registrant anywhere and by any means, including periodical and radio or television advertising.

(b) Advertising which may also be used as labeling. Printed or graphic matter directly associated with the marketing of an economic poison, such as counter displays, window displays, or handouts distributed with the product, is labeling and must be submitted in connection with registration.

(c) Advertising not considered to be labeling. Section 4a(3) of the Act provides that an applicant for registration shall file a statement of all claims for the economic poison, including the directions for use. All claims and directions for the use of an economic poison, regardless of where made, must be filed as a part of the application for registration. It is not required nor is it desired that copies of all advertising be filed if such advertising will never be used as labeling. However, under all circumstances, the claims to be made in such advertising should not exceed or differ in substance from those claims and directions which appear in labeling accepted in connection with registration under the Act.

(d) Cooperation with Federal Trade Commission. Advertising in periodicals and by television or radio is also subject to the laws enforced by the Federal Trade Commission. It is the policy of the Pesticides Regulation Division to cooperate with the Federal Trade Commission in order to avoid possible

conflict with or duplication of efforts in the administration of the Federal Insecticide, Fungicide, and Rodenticide Act and acts administered by that agency. In accordance with this policy there has been established a liaison, which is now in operation, for continued cooperation and coordination between the Federal Trade Commission and the Pesticides Regulation Division in the enforcement of the Federal Insecticide, Fungicide, and Rodenticide Act and the Federal Trade Commission Act as they apply to economic poisons. In general, the policy is for advertising, other than labeling, to be handled by the Federal Trade Commission. In the application of the above policy it is to be understood, however, that both agencies reserve the right to fully use their respective regulatory powers when necessary to protect the public interest.

§ 162.108 Interpretation with respect to labels for large containers.

(a) *Requirements of the Act.* The act and the regulations require labels on all containers of economic poisons which come within the scope of the act. There is no exemption in the case of large containers such as tank cars, tank trucks, or drums. Therefore, all such containers must be labeled.

(b) *Where label must appear.* (1) Labels for economic poisons in tank cars, may be attached to the panel borne by such cars for the purpose of attaching notices, or they may be placed directly on any conspicuous part of the tank where they can be easily read.

(2) Labels for economic poisons in tank trucks may be placed at any conspicuous place on the tank; however, when a tank truck is used only to deliver economic poisons to the user and the tank does not remain in the user's custody, a label attached to the tank would not be informative to the user. In such cases, the label may be attached to the delivery sheet which is carried by the driver of the truck and left with the user at the time of delivery.

(3) Labels for economic poisons in drums may consist of printed labels securely attached to the drums or labels may be stenciled on the drums. In either case labels must be clearly legible and easy to read.

(c) *Contents of label.* The following information must appear on the label:

(1) The name of the product. This must be the name under which it is registered with the Environmental Protection Agency.

(2) The name and address of the manufacturer, registrant, or person for whom manufactured.

(i) If the name is other than that of the manufacturer, the label should indicate this fact.

(ii) If the name is not that of the primary registrant, it must be the name of some other person or firm which has been added by a supplemental registration statement under the provisions of section 4a of the act.

(3) The net contents of the container, or in the case of a label attached to a delivery receipt of tank truck delivery, the net amount delivered.

(4) The ingredient statement.

(5) The registration number assigned to the economic poison as required in § 162.6(f).

(6) Any warning or caution statement which may be necessary to prevent injury to living man, beneficial animals, and beneficial plants. This statement is particularly important on large containers, since leakage may occur and result in injury to persons or property unless users or handlers are warned to take adequate precautions.

(7) In the case of an economic poison highly toxic to man, the skull and crossbones, the word "POISON" prominently in red, and an antidote statement.

(d) *Directions for use.* Directions for use are required on the labeling of economic poisons whenever they are necessary to protect the public.

(1) Detailed directions for use as prescribed in Interpretation 7 (Rev. 1) will be required on the labeling of all economic poisons for which the composition, methods of use, possible hazards involved, and effectiveness for economic poison purposes are not well known. Such directions for use may appear on the label or on other printed matter which is delivered to the user with the economic poison or otherwise accompanies the economic poison.

(2) Detailed directions for use may be omitted from the labeling of well known economic poisons which are sold in containers of 100 pounds or more of a solid intended primarily for use undiluted, 50 pounds or more of a solid intended primarily for use after dilution, 55 gallons or more of a liquid intended primarily for use undiluted, or 20 gallons or more of a liquid intended primarily for use after dilution: *Provided:*

(i) There is readily available general knowledge of the composition, methods of use, and effectiveness of the product for economic poison purposes;

(ii) Option 1 of the ingredient statement is followed; and

(iii) In the Opinion of the Director, such directions are not necessary for the protection of the public.

(e) *Acceptable types of labeling.* The following are examples of acceptable labels for two well known economic poisons.

(1) For creosote oil, free of water or free carbon.

CREOSOTE OIL

Active Ingredient 100%
John Doe and Company
Washington, D.C.
Net contents 55 gallons
EPA Reg. No. xxx-xx

CAUTION: Avoid prolonged or repeated contact with the skin or breathing of the vapors. Keep out of reach of children.

(2) For 5 percent DDT dust sold in a 100-pound barrel.

DDT DUST

Active Ingredient:	Percent
Dichloro Diphenyl Trichloroethane (DDT)	5
Inert Ingredients	95
Total	100

Net weight 100 pounds
John Doe and Company
New York, N.Y.
EPA Reg. No. xxx-xx

CAUTION: Keep out of reach of children. Avoid breathing dust. Avoid contamination of feed and foodstuffs.

§ 162.109 Interpretation with respect to the guaranty of an economic poison.

(a) *Purpose of the guaranty.* (1) The manufacturer of an economic poison is presumed to know the composition of his product and he will ordinarily be the one who registers it with the Environmental Protection Agency. He will, therefore, be in position to determine whether or not its shipment or distribution is legal.

(2) The distributor who purchases it from him will not be in a position to determine its composition except as he has it analyzed in a chemical laboratory and he will not know, except as his supplier may inform him, whether the product is registered, and what representations were made in connection with the registration. It will, therefore, be difficult for him to determine whether or not its shipment or distribution is legal.

(3) In order that the distributor may protect himself the act specifies that the penalties provided for violations of section 3a shall not apply to any person who establishes a guaranty, signed by and containing the name and address of the registrant or person residing in the United States from whom he purchased and received in good faith the article in the same unbroken package, to the effect that the article was lawfully registered at the time of sale and delivery and that it complies with the other requirements of the act, giving the name of the act in full. When the distributor holds such a guaranty, the guarantor is responsible for any violation involved in the shipment of the goods. However, the distributor, to avoid responsibility, must be able definitely to show that the economic poison in question is covered by a specific guaranty.

(b) *Who may give guaranty.* A guaranty may be given by any manufacturer, distributor, wholesaler, or any other person residing in the United States, who sells an economic poison to anyone else.

(c) *Scope and form of guaranty.* A guaranty may be either limited to a specific shipment or it may be general and continuing in nature. The following forms of guaranty are suggested:

(1) Limited form for use on invoice or bill of sale.

----- hereby guarantees
Name of guarantor
that the economic poisons herein listed are lawfully registered with the Administrator of the Environmental Protection Agency and

comply with all requirements of the Federal Insecticide, Fungicide, and Rodenticide Act.

Signature and postoffice address of guarantor

Date

(2) General and continuing form.

The economic poisons comprising each shipment or other delivery hereafter made by _____ to or on the order of

Name of guarantor

Name and address of

person receiving guarantee are hereby guaranteed to be lawfully registered with the Administrator of the Environmental Protection Agency and to comply with all requirements of the Federal Insecticide, Fungicide, and Rodenticide Act, as of the date of such shipment or delivery.

Signature and postoffice address of guarantor

Date

(3) In some cases an invoice may cover shipment of both economic poisons covered by permit for experimental use and registered economic poisons. The guaranty cannot apply to the economic poisons shipped under permit. Therefore, the above forms of guaranty must be modified to be applicable to such procedure. It is suggested that in such cases the name of the experimental economic poison as shown on the invoice or bill of sale be immediately followed by the word "Experimental." Then the first form of guaranty should be changed to read:

_____ hereby guarantees

Name of guarantor that the economic poisons herein listed (except such as are designated "experimental") are lawfully registered with the Administrator of the Environmental Protection Agency and that they comply with all requirements of the Federal Insecticide, Fungicide, and Rodenticide Act.

Signature and post office address of guarantor

Date

A similar change should be made in the second form of guaranty.

(d) *Reference to guaranty.* No reference to the guaranty may be made on the label or in the labeling of the product since such reference would be likely to give the purchaser an unwarranted sense of security.

(e) *Limitation of guaranty.* The guaranty applies only so long as the economic poison remains unchanged in the manufacturer's or registrant's unbroken immediate container bearing his label. It expires when the immediate package is opened, when the material is repacked or relabeled, or when it has been otherwise changed so as to be in violation of the law after shipment or delivery by the person giving the guaranty. For example, a product may deteriorate when stored for any considerable length of time. It may have been in strict compliance with the law when shipped by the guarantor but a year later, when shipped by the distributor, it may have

deteriorated and become worthless. In this case, the guaranty would not apply to the shipment a year later.

§ 162.110 Interpretation with respect to the analyzing and testing of economic poisons.

(a) *Analyzing and testing of economic poisons; functions of the Department.* Insofar as the Federal Insecticide, Fungicide and Rodenticide Act is concerned, the functions of the Environmental Protection Agency are those of a law enforcement agency. The Agency analyzes and tests economic poisons subject to the act to determine whether or not they are in violation of the provisions thereof. Its analytical and testing work is limited to official samples collected by official investigators or others who have been duly designated by the Director of the Pesticides Regulation Division. It cannot undertake such work to help a manufacturer prepare his labeling. It is the manufacturer's responsibility to have such work carried out, which may be done by commercial laboratories or by other qualified persons. The Agency is, however, willing to comment on proposed labeling submitted by manufacturers, based on available information.

The Agency has no authority to recommend or to approve any specific commercial laboratory or person engaged in doing analytical or testing work on economic poisons.

§ 162.111 Interpretation with respect to shipments for experimental use; permit requirements.

(a) *Shipments for experimental use by certain Federal and State agencies.* The penalties provided for violation of section 3a of the act do not apply to the manufacturer or shipper of an economic poison intended only for experimental use by or under the supervision of any Federal or State agency authorized by law to conduct research in the field of economic poisons. This means that a manufacturer may freely ship economic poisons for experimental use by or under the supervision of the agencies indicated without registration or any other compliance with section 3a of the act. No Federal permits for these shipments are required.

(b) *Shipments for experimental use by others.* In the case of shipments of economic poisons for experimental use only, to parties other than Federal or State agencies authorized by law to conduct research in the field of economic poisons or to those working under their supervision, the same exemption from the penalties set forth for violation of section 3a of the act exists: *Provided*, That a permit has been obtained from the Agency before shipment of the goods. This provision of the act is intended to apply primarily to shipments of products which have already been found to have economic poison value, but which are being tested further, usually on a larger scale, to determine their limitations. The information about

their effectiveness is usually not sufficient to enable the preparation of adequate directions for use and adequate warning statements and, therefore, suitable labeling for registration cannot be prepared without further experimentation. This experimental work may be carried out on a large scale, including treatment of many acres of crops in various sections of the country. However, it must be carried out in such a way as to avoid injury to humans and useful animals. If the economic poison is to be tested for a use which is likely to result in contamination of food or feed the affected food or feed must be disposed of without allowing it to be consumed by humans, or by useful animals except those used for toxicity tests, unless there is convincing evidence that the proposed use will not result in injury to them.

(c) *Sale of the product.* The economic poison may be sold to the user or may be supplied to him without charge. If it is not furnished without charge the label must bear, in addition to other required material, a statement of the names and percentages of the principal active ingredients in the product. This is intended to include the names and percentages of the ingredients commonly known as toxicants but not necessarily the names and percentages of ingredients which act primarily as solvents, emulsifiers, carriers or in a similar manner. The experimental work must be carried out by persons qualified to evaluate the results obtained. Offering the product for sale to anyone who wishes to purchase it is not considered marketing for experimental use only, and is prohibited. Products so offered will be subject to registration and all other requirements of the law.

(d) *Types of products and labeling.*

(1) An economic poison shipped for experimental use may be one which has not previously been used as an economic poison, or it may be one which has had other economic poison uses and is now being tested for a new use.

(2) The labeling of all economic poisons shipped under permit must bear the following:

(i) The prominent statement "For Experimental Use Only" on the container label and any accompanying circular or other labeling.

(ii) A warning or caution statement if it is necessary for the protection of those who may handle or be exposed to the economic poison.

(iii) The name and address of the applicant for the permit.

(iv) The name of the formulation; and,

(v) If the economic poison is to be sold, the names and percentages of its principal active ingredients.

(e) *Specific and general permits.* (1) If a manufacturer desires to make a single shipment of an economic poison for experimental use, he may obtain a permit for that specific shipment; or

(2) If he desires to make more than one shipment of a single economic poison or closely allied economic poisons for experimental use, he may apply for a

general permit. A general permit will be subject to the following limitations and may be cancelled at any time for any violation of its terms:

(i) It will be good only for a specified period of time, in no case exceeding one year.

(ii) It will be subject to the truthfulness of the representations made in the application for the permit.

(iii) It will apply only to one economic poison or closely allied group of such products. This provision is intended to include under one permit different formulations of the same material which are being tested to determine the best formulation for the particular use, but is not intended to include under one permit entirely different chemicals used as economic poisons.

(i) *Application for permits.* An application for a permit for shipment for experimental use should be made in duplicate on forms which may be obtained from the Pesticides Regulation Division, Environmental Protection Agency, Washington, D.C. 20250, giving in full the following information:

(1) Name and address of the shipper and place or places from which the shipment will be made.

(2) Proposed date of shipment or proposed shipping period not to exceed one year.

(3) A statement of the composition of material to be covered by the permit which should apply to a single material or group of closely allied formulations of the material.

(4) A statement of the approximate quantity to be shipped.

(5) Available data or information or reference to available data or information on the acute toxicity of the economic poison.

(6) A statement of the nature of the proposed experimental program, including the type of pests or organisms to be experimented with, the crops or animals for which the product is to be used, the areas where it is proposed to conduct the program, and including the results of previous tests where necessary to justify the quantity requested.

(7) When food or feed is likely to be contaminated, either a full statement of action which will be taken to prevent the food or feed from being consumed, except by laboratory or experimental animals, or convincing evidence that the proposed experiment will not result in injury to man or useful animals.

(8) The percentage of the total quantity specified under subparagraph (4) of this paragraph which will be supplied without charge to the user.

(9) A statement that the economic poison is intended for experimental use only.

(10) Proposed labeling for the product.

Applications will be considered as rapidly as possible. In special cases the manufacturer may request telegraphic

notification at his expense of the issuance of the permit.

(g) *Limitation of quantity of economic poison permitted for experimental use.* When the available information on the effectiveness, toxicity or other hazards inherent in a proposed experimental use of an economic poison is not sufficient to assure that it is safe under the conditions of the experiment, the full quantity requested may not be permitted or other limitations may be placed upon the permit if necessary for the protection of the public. This is intended to apply particularly if the material is to be handled and applied by people who have not been especially trained in the use of poisons or if its use on a scale as broad as that requested is likely to constitute an unwarranted hazard.

(h) *Cancellation of permits.* A permit for shipment of an economic poison for experimental use may be canceled at any time for any violation of its terms. It may also be canceled if it appears upon further consideration that distribution of the product under the terms of the permit constitutes a hazard to the public.

(i) *Custom mixes.* Permits will not be issued for so-called custom mixes which are ordinarily economic poisons prepared to the special formula of the user. These are not intended for experimental use, but are special economic poisons intended for special uses. When shipped in interstate commerce, they are subject to the registration and other provisions of the law.

(j) *Shipment of products not classified as economic poisons.* Section 162.17

(a) (1) provides that a product is not an economic poison when it is being put through tests in which the purpose is only to determine its value for economic poison purposes or to determine its toxicity or other properties, and when the user does not expect to receive any benefit in pest control. This will, in general, include products being put through so-called screening tests or preliminary tests to determine whether further tests with them are worth while; products shipped to toxicological laboratories to determine their toxicity; products sent to chemical laboratories for chemical investigation; and products shipped for tests by testing laboratories which maintain test plots solely to evaluate the effectiveness of the product and not for the value of the crops obtained. Permits are not required for shipments of products of this type and they are not subject to the provisions of the act in any way. There is no requirement for any report concerning them to the Agency, except when it is necessary to report the results of the tests to support claims when they are later submitted for registration or when an application for a permit for shipment for experimental use is submitted. However, confidential progress reports will be valuable to the Agency.

§ 162.113 Interpretation with respect to liquid and pressurized household insecticides acceptable for general-use application (primarily non-deposit forming).

(a) *Composition.* These products are ordinarily marketed as solutions, emulsions, suspensions, or pressurized products and are designed for use in undiluted form by the consumer. In a few cases, concentrated products requiring dilution are marketed. These products usually have a petroleum distillate base, together with such auxiliary solvents as may be necessary to keep the formulation as a solution under conditions of relatively low temperature. Water is sometimes used in the liquid formulations. Auxiliary solvents such as methylated naphthalenes, methylated aromatic petroleum solvents, and methylene chloride are frequently used, although the latter is more common in pressurized products. The propellants commonly encountered are known as Propellant 11 (trichloro monofluoro methane) and Propellant 12 (dichloro difluoro methane). Propellant 12 may be used alone or in various proportions with Propellant 11, methylene chloride, or methyl chloroform. This interpretation is not intended to cover products intended primarily to be used in such a manner as to deposit substantial quantities of insecticides on treated surfaces.

(b) *Acceptable ingredients.* The following chemicals are frequently encountered in household-type insecticides of this class. The percentage figures given are the maximums which are ordinarily encountered in this class of products. An asterisk indicates that the percentage specified is the maximum being accepted. The other percentage figures should not be regarded as maximum at the present time, even though further information may necessitate modification of these figures and the use of additional asterisks. All percentage figures are expressed in terms of weight. Ingredient statement requirements are discussed in paragraph (c) of this section.

Pesticidal chemical	Percentage in liquid space and contact sprays	Percentage in aerosol mist sprays
Allethrin (allyl homolog of cinerin I) —%	0.5	0.6
Beta-butoxy-beta'-thiocyanodiethyl ether —% (Lethane 384)...	13.5	14.0
Beta-thiocyanoethyl esters of mixed fatty acids containing 10 to 18 carbon atoms —%. Beta-butoxy-beta'-thiocyanodiethyl ether —% (Lethane 384 Special)...	13.5	11.0
Butoxypropylene glycol —%	10.0	5.0
Dichloro diphenyl dichloroethane —% (TDE).....	*6.0	None

Footnote at end of table.

Pesticidal chemical	Percentage in liquid space and contact sprays	Percentage in aerosol mist sprays
Dichloro diphenyl trichloroethane —% (DDT)	*6.0	*8.0
Diethyl diphenyl dichloroethane [or 1,3-dichloro-2,2-bis (4-ethylphenyl) ethane] —% (95% of the total amount of technical ingredient present). Related compounds —% (5% of the total amount of technical ingredient present) (Perthane)	*5.0	*3.0
Gamma isomer of benzene hexachloride from lindane —%	*0.1	None
Isobornyl thiocyanacetate —% (82% of the total amount of technical ingredient present). Related compounds —% (18% of the total amount of technical ingredient present) (Thamite)	3.5	*3.0
Malathion —%	2.0	*5.0
Pyrethrins —%	0.2	0.6
Rotenone —% (Usually "Other Cube Resins," another active ingredient, is also present in formulations containing this ingredient)	0.1	0.33
Technical methoxychlor —% ¹	5.0	*3.0
Terpenepolychlorinated (66% chlorine) —% and an additional statement: "Chlorinated Camphene, Pinene, and Related Terpenes," (Strobane)	*2.0	*2.5
Toxaphene —% ⁴	*2.5	*2.5
<i>Synergists</i>		
Di-n-propyl maleate isosafrole condensate —% (Propyl isomer)	2.0	2.0
N-octyl-bicycloheptene dicarboximide —%	2.5	2.0
Octyl sulfoxide of isosafrole —% (Sulfoxide)	2.0	4.0
Sesame oil extractives —% ⁵	1.5	8.0
Technical piperonyl butoxide —% ⁶	1.5	2.0

¹ Thiocyanate.
² O,O-dimethyl dithiophosphate of diethylmercaptosuccinate.
³ Equivalent to —% (88% of the first percentage) 2,2-bis(p-methoxyphenyl) 1,1,1-trichloroethane and —% (12% of the first percentage) other isomers and reaction products.
⁴ Technical chlorinated camphene (67% to 66% chlorine).
⁵ Containing sesamin —%.
⁶ Equivalent to —% (80% of the first percentage) (butylcarbityl) (6-propylpiperonyl) ether —% related compounds (20% of the first percentage).

These products frequently contain a combination of pesticidal ingredients, together with synergized pyrethrins and thiocyanates. These ingredients may be used in any combinations desired except that when combinations of phosphates and/or chlorinated hydrocarbons are proposed, concentrations of these ingredients should be proportionately reduced. The following is illustrative of a mixture of DDT and malathion which would be acceptable:

	<i>Maximum percentage by weight in liquid products</i>
Insecticidal mixture:	
DDT.....	3 percent
plus.....	plus
Malathion.....	1 percent

DDT when used alone may be present to the extent of 6 percent. Malathion when used alone may be present to the extent of 2 percent. When combinations of these ingredients are used the quantities of each must be proportionately reduced as in the above illustration. A finished liquid formulation containing 1.0 percent

malathion plus 1.5 percent DDT would also be accepted. There would be no objection to any separately acceptable amounts of the thiocyanates or synergized pyrethrins being added to a liquid formulation.

(c) *Ingredient statement.* The following form of ingredient statement would fulfill legal requirements for a hypothetical liquid mixture containing pyrethrins, petroleum distillate, piperonyl butoxide, perthane, and malathion:

Active ingredients:	Percent
Pyrethrins.....	-----
Malathion ¹	-----
Technical piperonyl butoxide ²	-----
Diethyl diphenyl dichloroethane.....	-----
Petroleum distillate.....	-----
Total.....	100

¹ 0,0=dimethyl dithiophosphate of diethylmercaptosuccinate.
² Equivalent to -- percent (butyl carbityl) (6 propyl piperonyl) ether and -- percent related compounds.

The correct figures should, of course, be entered in the blank spaces. As an alternative, the names of the ingredients may be listed in the descending order of their respective percentages. In such cases the heading "Active Ingredients 100%" should be used. The term "100%" may be omitted when actual percentage figures are given for each active ingredient. An illustration of this alternative form of ingredient statement appears elsewhere for a hypothetical pressurized formulation.

The following forms of ingredient statements would fulfill legal requirements for a pressurized product containing pyrethrins, piperonyl butoxide, and DDT:

Active ingredients:	Percent
Pyrethrins.....	-----
Technical piperonyl butoxide ¹	-----
Dichloro diphenyl trichloroethane.....	-----
Petroleum distillate.....	-----
Inert ingredients.....	-----
Total.....	100

OR

Active ingredients:	Percent
Petroleum distillate.....	-----
Dichloro diphenyl trichloroethane.....	-----
Technical piperonyl butoxide ²	-----
Pyrethrins.....	-----
Inert ingredients:	
Methylene chloride.....	-----
Dichloro difluoro methane.....	-----

¹ Equivalent to -- percent (butyl carbityl) (6 propyl piperonyl) ether and -- percent related compounds.
² Consists of (butyl carbityl) (6 propyl piperonyl) ether and related compounds.

In all cases, the correct percentages should be entered in the blank spaces. The tabulation of pesticidal chemicals appearing in paragraph (b) of this section gives appropriate suggestions for the naming of ingredients. Except for explanatory parenthetical wording, the information given in paragraph (b) of this section is suitable for use in label ingredient statements. Interpretation 5 gives further information on the preparation of correct ingredient statements.

The ingredient statement should in all cases accurately reflect the complete composition of the product. The names given for the various ingredients must be the common names, if they have common names. Otherwise, the chemical names as specified above should be used. Trademarked names should not be used in the ingredient statement.

(d) *Basic insecticidal value*—(1) *Petroleum distillate sprays.* Liquid spray products of this class should have as a minimum the insecticidal value of a petroleum distillate solution of pyrethrins containing 114.8 mg. of this ingredient per 100 cc. of solution. For practical purposes, this reference standard should have the same biological value as the current Official Test Insecticide which is prepared and distributed under the supervision of the Chemical Specialties Manufacturers Association, 50 East 41st Street, New York 10017, New York. Any testing procedure which accurately compares the toxicity of the standard mixture to the liquid product being evaluated, will be considered. The testing procedures published as "The Peet-Grady Method" and the "Cockroach Spray Test Method" by the above-mentioned association will be considered as satisfactory for flies and roaches, respectively. These methods will not be regarded as interchangeable, since they only evaluate the comparative toxicity of liquid insecticides against the pests named. These methods are given in the 1959 edition of the Blue Book and Catalogue edition of Soap and Chemical Specialties, published by the MacNair-Dorland Company, 254 West 31st Street, New York City. These testing procedures may not be considered as adequate or applicable when new or unusual pesticidal chemicals are included in the formulation or if claims and directions for killing insects other than roaches or flies are proposed. If such products are intended to be used for killing household pests other than flies or roaches, special attention will be given to assessing the toxicity of the pesticide for the purposes which are proposed. Full information on the proposed claims and directions should be submitted in each case. It will be necessary for the applicant to submit data to establish the safety of any new or unusual chemical or pesticidal treatment that is proposed. It is the usual practice to consult with the Public Health Service of the Department of Health, Education, and Welfare on such matters.

(2) *Aerosol-type products.* Pressurized formulations classified as "aerosols" are usually marketed in dispensers ranging from a few ounces to 5 pounds. However, most of the items designed for mass distribution are packaged in sizes of 12 ounces and 16 ounces. These products contain 80 percent or 85 percent of propellant gas, usually a combination of Propellant 11 and Propellant 12. Methylene chloride or methyl chloroform is frequently substituted in whole or in part for Propellant 11. As a minimum, these products should have the knockdown and insecticidal value of a product containing

85 percent of a 50-50 mixture of Propellant 11 and Propellant 12, and 15 percent of petroleum solvent containing sufficient pyrethrum extract and DDT to yield 0.4 percent pyrethrins and 2 percent DDT in the total formulation. The reference standard should have the same biological value as the current Official Test Aerosol dispenser of the Chemical Specialties Manufacturers Association. These dispensers may be obtained from the Association at 50 East 41st Street, New York 17, New York. Any testing procedure which accurately compares the knockdown and toxicity of the test aerosol with the reference standard will be considered. The official method of the Association, published in the 1959 edition of the Blue Book and Catalogue, as previously noted, will be accepted, provided the results demonstrate that the product is no less effective in 5-minute, 10-minute and 15-minute knockdown and 24-hour mortality intervals than the comparison formulation when tested against house flies at the same dosage or less. This method of testing may not be considered as adequate if claims and directions for killing insects other than flies are proposed or if new or unusual ingredients or insecticidal usage are involved. In any test, the spray from aerosol dispensers should be in a finely divided form, in which 80 percent or more of the individual spray particles have a mean diameter of 30 microns or less and none of the spray particles have a diameter of more than 50 microns. Products which do not have the necessary biological activity when tested by the specified methods or which dispense a coarser type spray should not be represented as being "aerosols." Full information on the proposed claims and directions should be filed in all such cases. It will be necessary for the applicant to submit data to establish the safety of any new or unusual chemical ingredient or pesticidal treatment that is proposed. It is the usual practice to consult with the Public Health Service of the Department of Health, Education, and Welfare of such matters.

(3) *Pressurized space and contact sprays.* Products of this class are less common, and differ from the aerosol-type products in that their biological performance is of a lower order and usually somewhat slower in effect on the insects which are sprayed. These products deliver mist sprays intermediate between aerosol-type sprays and those which are intended to deposit an insecticidal residue of a chemical. They should have the biological performance of the reference standard specified for the aerosol-type product when a dosage of no more than twice that used for the same reference standard has been applied. Also, for these purposes the testing procedure may be modified to omit comparisons of the knockdown at the 5-minute and 10-minute intervals. The comparisons in such cases will be only at the 15-minute knockdown and 24-hour mortality intervals. The product will be regarded as having sufficient insecticidal value if the average 15-minute knockdown and

24-hour mortality figures are no more than 5 percentage points under the comparable figures for the reference product. If claims and directions for killing insects other than flies are included, or if new or unusual chemicals are included in the formulation, individual consideration will be given to the proposed claims and directions on a separate basis. It will, of course, be necessary to submit data to establish the safety of any new or unusual ingredient or pesticidal usage. It is the usual practice to consult with the Public Health Service of the Department of Health, Education, and Welfare on such matters.

(e) *Directions for use—(1) General.* In all cases, the labeling should bear adequate directions for use against all of the insects named in the labeling. Although these products are commonly referred to as "fly sprays," "aerosols," or "pressurized products," they are usually recommended for use against a number of household insects, including house flies, mosquitoes, roaches (water bugs), bed bugs, ants, carpet beetles, brown dog ticks, and clothes moths. These products are primarily contact insecticides and in order to be effective must hit or wet the individual insect with the spray mist. Since the habits and life cycles of different insect pests vary considerably, the directions must in each case be adapted to the particular variety of insect which is causing annoyance and the type of structure or building in which the product is used.

(2) *Particular insects—(1) Flies and mosquitoes.* Directions for use against these pests should provide for closing the doors and windows and thoroughly spraying all parts of the room, particularly toward the ceiling, so as to fill the room with a fine mist. The room should be kept closed for 10 to 15 minutes and the fallen insects swept up and destroyed. However, when strong formulations are used, containing substantial amounts of rapidly acting paralytic agents, it is simply necessary to ascertain that the various insects have been thoroughly enveloped in the spray mist. Pressurized aerosol formulations and pressurized sprays may also be used in a manner quite similar to the liquid products. Dosages of aerosol and pressurized formulations are sometimes expressed in terms of seconds of discharge with appropriate adjustments for low and high delivery rate dispensers. These dosages usually are in the range of 4 to 5 grams of aerosol mixture in mist form per 1000 cubic feet of space.

(ii) *Household ants and roaches.* The directions for use against these pests should provide for thorough spraying into all parts of the room suspected of harboring these pests. Special attention should be paid to cracks and hidden surfaces around sinks or food storage areas where these insects may be hiding. It is necessary in all cases that the insects be contacted directly with the spray. Treatment around doors and windows is desirable in connection with directions for use against ants. Pressurized formulations may also be used, but since lib-

erality of application is essential, small pressurized dispensers may not give as good results in some cases. Repeated applications should be specified in all cases. Special care should be taken to use these products in such a manner that food and food utensils will not be contaminated. If any spray contaminates cooking utensils, silverware, or dishes, they should be thoroughly cleaned.

(iii) *Bed bugs.* The directions for use against these pests should provide for thorough spraying of the bed, the springs, and the mattress, as well as the baseboards and wall cracks about the bedroom. Repeated applications are usually necessary for good results against these pests. In the case of malathion, the maximum acceptable concentration for this use is a 1 percent spray, which in any case is to be applied lightly to the mattress.

(iv) *Clothes moths and carpet beetles.* The directions for use against these pests should provide for cleaning all articles to be protected and for thorough spraying, particularly of seams and folds. The interior of trunks, closets, cupboards, and other storage containers should also be thoroughly sprayed. Unless the sprayed articles are to be stored immediately in moth-tight containers, the directions should provide for repeating the treatment at least once a month. In the case of upholstered furniture, the directions should provide for spraying the interior of the furniture, as well as the outer surfaces, unless the furniture can be fumigated to kill any hidden infestation of these pests. Rugs and carpets that are to be treated may also be sprayed, not only on the top surfaces, but also on the under side. However, when carpet beetles are a serious problem, it is usually desirable to use a residual type insecticidal treatment. Pressurized products, including aerosols, may be used on the same terms, but are less suitable, since small dispensers do not ordinarily permit the liberality of treatment which is usually necessary for good results.

(v) *Fleas and brown dog ticks in buildings.* Directions for use against these pests should provide for liberal applications to floor areas, cracks and crevices, sleeping quarters of animals, behind pictures, and wherever these insects may be suspected of harboring. Liberal and repeated applications directly to the individual pests are desirable in all cases.

(vi) *Mosquitoes and small flying insects outdoors.* Liquid and pressurized products of the types described can often be used effectively as mist spray applications for tall grass, shrubbery and around lawns where these pests may hover or harbor. This usage is suitable only in still air and requires frequent reapplication to kill additional insects that may be drifting into the area. It is not suitable for coping with any large influx of insects. Care should be taken to avoid wetting vegetation since many of these formulations are phytotoxic. Only mist spray application should be directed.

(f) *Caution and warning statements*—

(1) *General.* All economic poisons are required to bear warning or caution statements which are necessary to protect the public from injury, and acceptable directions for use must be consistent with these requirements. These cautions and directions are quite variable, depending on the composition of the product and the manner of use which is intended. The detailed precautions, especially for operator protection during use of most of the various pesticidal ingredients, are given in the current revision of Interpretation 18. Cautions to protect food and food-handling equipment from contamination are often required and are appropriate in any case. These products should ordinarily be kept out of reach of children and pets.

(2) *Liquid household insecticides.* In all cases where petroleum distillate or other combustible formulations are involved, warning against spraying in the presence of open flame or sparks is required.

(3) *Pressurized household insecticides.* Since many of these products contain significant amounts of petroleum distillates, other combustible substances, and/or halogenated hydrocarbons yielding irritant substances in the presence of open flame or heated surfaces, and since bursting or leakage of contents may occur at high temperatures, all pressurized products (except as specified hereafter) should bear the following warning or its practical equivalent:

WARNING: Contents under pressure. Do not puncture. Do not use or store near heat or open flame. Exposure to temperatures above 130° Fahrenheit may cause bursting. Never throw container into fire or incinerator.

Pressurized products which have extreme flammability or explosive hazards will be considered separately and additional precautionary labeling prescribed. Methods for determining the need for such additional precautionary labeling may be obtained from the Director, Pesticides Regulation Division, Environmental Protection Agency, Washington, D.C. 20250. It is the responsibility of the registrant to provide precautionary labeling which will be adequate, if complied with, to prevent injury to persons using or handling his product.

(g) *Deterioration.* Petroleum distillate sprays containing pyrethrins, if exposed too long to light in ordinary glass bottles, or stored for long periods of time, may lose their efficiency due to deterioration of the active ingredients. Also, certain types of packaging may permit deterioration. All products should maintain their active ingredients at the levels declared on the label and represented at the time of registration as long as they remain in unopened containers in channels of trade.

(h) *Grade classification.* The grade classifications given in Commercial Standard CS 72-54 apply to liquid fly sprays and should be used only to classify such products. If a claim for grade classification is made for a fly spray, it should be only such a grade as may be

fully justified by the killing action and knockdown effect of the product when tested against house flies. Except for fly sprays, there is no generally recognized grade classification for household insecticides and no such claims should be made other than for fly sprays.

(i) *Unwarranted claims.* These products are not effective against all household insects, and claims for effectiveness against insects generally or all insects, are unwarranted and should not be made. These products, as customarily marketed, are not effective against termites and cannot be relied upon to kill any insect which cannot be reached directly by the spray. This applies also to the eggs of many insects, which are often placed in inaccessible cracks or hidden surfaces. Claims for extermination are not warranted and should not be made. Products of this type are injurious under certain conditions to both men and animals and may contaminate food when improperly used. Therefore, their labels must ordinarily not bear any unqualified claims such as "Non-Toxic," "Non-Poisonous," "Non-Injurious," or "Harmless to Man and Animals." Such products are of no value in disinfecting and will not prevent diseases, and claims to that effect should not be made.

(j) *Registration.* All applications for registration should include duplicate copies of all labels, circulars, or other literature which may be associated with or accompany the product at any time. Complete information concerning the composition of the product should also be furnished with the application. If the product does not conform to a conventional pattern of pesticidal usage against household pests, data should be furnished to demonstrate the practical value of the product for the various pests which are named in the labeling. Consultation with applicants is solicited at all times, in order to eliminate possible misunderstanding.

§ 162.115 Interpretation with respect to labeling of weed killers containing 2,4-D, 2,4,5-T, and MCPA.

(a) *Composition.* In this interpretation, 2,4-D is a designation for 2,4-dichlorophenoxyacetic acid; 2,4,5-T is a designation for 2,4,5-trichlorophenoxyacetic acid; and MCPA is a designation for 2-methyl-4-chlorophenoxyacetic acid. These designations will also represent the salts and esters of these acids when they are used as weed killers. The acids themselves are not very soluble in water and ordinarily are not used alone; they may be mixed with an alkali, such as sodium carbonate, so that the sodium salt will be formed when the mixture is added to water, but they are commonly used as amine salts, as volatile esters, including the ethyl, butyl, propyl, and amyl series, or as low-volatile esters, including butoxy ethanol, polyethanol glycol butyl ether, tetrahydrofurfuryl, ethoxy ethoxy propyl, butoxy ethoxy propyl, iso-octyl, and others.

(b) *Ingredient statement.* (1) The active ingredients in a weed killer containing 2,4-D, 2,4,5-T, or MCPA will be

the actual compounds of the acids which are present. In a powder containing 2,4-D acid and sodium carbonate, for example, the active ingredient would be the 2,4-dichlorophenoxyacetic acid; in a product containing the anhydrous sodium salt of 2,4-D, however, the active ingredient would be the anhydrous sodium salt of 2,4-dichlorophenoxyacetic acid; the ethanol amine salt of 2,4-dichlorophenoxyacetic acid would be the active ingredient in a product containing it; and any specific esters of 2,4-dichlorophenoxyacetic acid present would be declared as the active ingredients in products containing them. The same principle would be followed for the various formulations containing 2,4,5-T or MCPA.

(2) Since the herbicidal action of products containing 2,4-D, 2,4,5-T, or MCPA has been reported on the basis of the equivalent content of their respective acids, it is desirable that the equivalent amount of the acid be given in the ingredient statement. However, it should be borne in mind that some compounds, particularly the esters, act differently from others and it is not safe, therefore, to base judgment entirely on the equivalent acid content.

(3) When sodium 2,4-dichlorophenoxyacetate monohydrate is present in a dry mixture, it should be considered the active ingredient. In water solutions, the convention has been adopted of declaring only the anhydrous forms of the dissolved solids as active ingredients; thus, in a water solution of sodium 2,4-dichlorophenoxyacetate monohydrate, the active ingredient would be declared as "anhydrous sodium 2,4-dichlorophenoxyacetate."

(4) The following forms of ingredient statements for 2,4-D are acceptable for the types of materials indicated. In each case, correct values should be inserted in the blank spaces.

(i) A dry mixture of 2,4-dichlorophenoxyacetic acid, sodium carbonate, and other inert ingredients:

Active Ingredient:	Percent
2,4-dichlorophenoxyacetic acid.....	.....
Inert Ingredients.....	.....
Total.....	100

(ii) A mixture of the anhydrous sodium salt of 2,4-dichlorophenoxyacetic acid and inert materials:

Active Ingredient:	Percent
Sodium salt of 2,4-dichlorophenoxyacetic acid ¹.....	.....
Inert Ingredients.....	.....
Total.....	100

¹ Equivalent to 2,4-dichlorophenoxyacetic acid ... percent.

(iii) Isopropyl amine salt of 2,4-dichlorophenoxyacetic acid and inert ingredients:

Active Ingredient:	Percent
Isopropyl amine salt of 2,4-dichlorophenoxyacetic acid ¹.....	.....
Inert Ingredients.....	.....
Total.....	100

¹ Equivalent to 2,4-dichlorophenoxyacetic acid ... percent.

(iv) Butyl ester of 2,4-dichlorophenoxyacetic acid and inert ingredients:

Active Ingredients:	Percent
Butyl ester of 2,4-dichlorophenoxyacetic acid ¹	-----
Inert Ingredients.....	-----
Total.....	100

¹Equivalent to 2,4-dichlorophenoxyacetic acid --- percent.

The above examples of ingredient statements would also apply to similar formulations of 2,4,5-T and MCPA.

Tables of equivalent percentages of the salts, amine salts, and esters of 2,4-D, 2,4,5-T, and MCPA, for use in computing the equivalent percentages of the acids, may be obtained from the Pesticides Regulation Division, Environmental Protection Agency, Washington, D.C. 20250.

(c) *Directions for use.* (1) 2,4-D weed killers have been used successfully to control broad leaf weeds, such as plantain, dandelion, henbit and chickweed in lawns and golf courses, to destroy certain weeds in drainage ditches and streams (but in this case caution must be exercised not to contaminate water used for irrigation or domestic purposes), and to treat rice, flax, sugar cane, oats, barley, wheat and corn fields. Such uses are not without danger to other plants, however, the danger being especially great when dusts and esters are applied.

(2) 2,4,5-T is more effective against hard-to-kill weeds and woody plants, such as deep-rooted perennial weeds, brambles, sagebrush, and trees and shrubs growing in non-cropped or other waste areas, fence and hedge rows, under utility lines, along railroads and highways, around air fields, buildings, and lumber yards, and along ditchbanks and water ways. It is also used to control weeds in rice. Caution should be exercised to avoid contaminating waters used for irrigation or domestic purposes.

(3) MCPA is commonly used in Europe as a weed killer and is being used successfully in this country to control common broad leaf weeds in grains and other crops. It is particularly useful on oats, flax and peas, to which crops it is less injurious than 2,4-D.

(4) It is the responsibility of the manufacturer to prepare adequate directions for use which, when followed, will render the product effective against the weeds it is intended to control without causing injury to persons, valuable plants, or animals. The following points should be given consideration:

(i) Time and place of application (for most effective weed control with minimum injury to valuable plants).

(ii) Method of application.

(iii) Dosage (pounds of acid equivalent per acre is commonly used).

(iv) Dilution (if product is to be used as a water or oil spray).

(d) *Caution or warning statement to avoid injury to valuable plants.* (1) Herbicides containing 2,4-D, 2,4,5-T, MCPA, or their salts or esters, when used as selective weed killers, have been found to cause damage to valuable crops and plants under many conditions. Such

crops as tomatoes, cotton, and grapes are severely damaged by small amounts of 2,4-D or related compounds. When used in a dust form, the pesticide may drift for miles. Dusting by airplane particularly is likely to cause damage by such drifting, and for this reason, dust formulations should not be applied by airplane. Ester formulations of these herbicides are volatile, and the so-called "low-volatile" ester formulations are known to be volatile under conditions of higher temperatures. These herbicides should not be applied near plants they are likely to kill. All weed killers containing 2,4-D or related compounds should be stored where they will not contaminate seeds, fertilizers, insecticides, or fungicides. Dusting or spraying equipment in which 2,4-D and related compounds have been used should be thoroughly cleaned with a suitable alkaline chemical, or with activated charcoal before being used for other purposes.

(2) Suggested caution or warning statements for labeling agricultural spray materials containing 2,4-D, 2,4,5-T, MCPA, or their salts or esters, are as follows:

CAUTION: Avoid spray drift to susceptible plants as this product may injure cotton, beans, peas, grapes, ornamentals, etc. (coarse sprays are less likely to drift). Thoroughly clean spray equipment with a suitable chemical cleaner before using for other purposes (or do not use same spray equipment for other purposes). Do not store near fertilizers, seeds, insecticides, or fungicides.

(3) Suggested caution or warning statements for labeling agricultural dust preparations containing 2,4-D, 2,4,5-T, MCPA, or their salts or esters, are as follows:

CAUTION: Before using, consult agricultural authorities in your State. This dust may drift for miles, even on quiet days, and cause damage to susceptible plants such as cotton, beans, grapes, peas, etc. Do not apply by airplane. Use only where there is no hazard of drift. Do not store near fertilizers, seeds, insecticides, or fungicides. After use of this dust, do not use same equipment for insecticides or fungicides (or give directions for cleaning the equipment).

(4) In addition to the above statements, preparations containing esters should bear a warning against the hazards due to their vapors, such as:

Vapors from this product may injure susceptible plants in the immediate vicinity.

(5) Other wording for the caution or warning statement may be used provided it is equally informative and effective.

(6) Herbicides containing 2,4-D, 2,4,5-T, or MCPA prepared in small packages for home garden and lawn use should contain adequate caution or warning statements on their labels to warn of the hazards in their use. When recommended for use on grass lawns, golf courses and cemeteries, the label should warn of possible injury to bentgrass, St. Augustine grass, Dichondria and carpetgrass, and damage to grass seedlings on newly seeded ground. The hazards of the drift of spray and dust should be noted by a statement such as:

"Avoid drift of spray mist (dust) onto vegetables, flowers, ornamental trees and shrubs, and other desirable crop plants."

(e) *Caution or warning statement to avoid injury to man or animals.* Available information does not indicate that herbicides containing 2,4-D, 2,4,5-T or MCPA are highly toxic to man. Therefore, their labels are not required to bear the word "Poison," the skull and crossbones, or an antidote statement. However, they may cause irritation to the skin and eyes, and products containing the free acids, or inorganic salts of 2,4-D, 2,4,5-T or MCPA, in concentrations of 20 percent and above, should bear caution statements such as: "Avoid inhaling dust. Avoid contact with skin, eyes, or clothing." Organic esters or amine salts of these herbicides require a caution such as, "Avoid contact with skin, eyes or clothing."

(f) *Products not intended for economic poison use.* Products containing 2,4-D, 2,4,5-T or MCPA which are intended for use solely to delay fruit drop, or for other non-economic poison uses are not subject to the Act and need not comply with its provisions.

§ 162.116 Interpretation with respect to warning, caution, and antidote statements required to appear on labels of economic poisons.

(a) *Requirements of the act.* Section 2, z. (2) (d) of the act provides that an economic poison is misbranded if its label does not contain a warning or caution statement which may be necessary and if complied with adequate to prevent injury to living man and other vertebrate animals, vegetation, and useful invertebrate animals. Section 3. a. (3) of the act requires that any economic poison which contains any substance or substances in quantities highly toxic to man must bear on the label the skull and crossbones, the word "Poison" (in red) on a contrasting background, and an antidote statement.

(b) *Categories of toxicity and general provisions as to statements required for economic poisons therein.* (1) Four general categories of toxicity of economic poisons are recognized. The first is the highly toxic class as defined in § 162.8. The second is the class immediately below the highly toxic, and in general includes formulations having toxicities down to one-tenth those of the highly toxic class. The third group embraces products having hazards below the class two but to a degree which still requires some cautions and usually includes toxicities down to about one-tenth of those in class two. The fourth class is comparatively free from danger.

(2) Products in the categories specified in subparagraph (1) of this paragraph are to be distinguished from each other by the following general scheme:

(i) Highly toxic products are required by the act to be labeled with the skull and crossbones, the word "Poison" (in red) on a contrasting background, and an antidote statement. The antidote statement should include the sentence

"Call A Physician Immediately." In addition, the label should carry the word "Warning" and instructions for handling to reduce chances of injury in use.

(ii) Labels of products which fall in the second category should carry warning statements equivalent to those required for highly toxic materials, but they do not need to bear the skull and crossbones, the word "Poison," or an antidote statement.

(iii) Labels of products in the third category should carry the word "Caution" and statements indicating the means of avoiding the principal hazards of use. Use of the skull and crossbones, the word "Poison," and antidote statements are not necessary for these products.

(iv) No warning, caution, or antidote statements are required for the few formulations in the fourth category, although unqualified claims for safety are usually not justified.

(c) *Miscellaneous provisions.* (1) Warning or caution statements on the labels of economic poisons must give concise and easily understood warnings as to the hazards associated with the use of the products, together with instructions to be followed to insure adequate protection. Precautionary labeling should warn against the hazards associated with the formulation both as it is sold and as used by the customer, whether it is suitable for use directly or must be diluted or mixed prior to application.

(2) The precautionary labeling detailed in this interpretation for specific economic poisons is directed primarily toward the avoidance of hazard to the persons handling or applying the economic poison and to persons or animals exposed to the economic poison incident to its handling or use. The manufacturer should recognize the possibility of injury of other types associated with the use of his product and the label should bear suitable directions for the avoidance of such injury. When an economic poison is intended for use on or around feed or food products and contamination with harmful residues may occur, the label should bear specific statements adequate to avoid danger of contaminating such feed or foodstuffs. For some formulations, the residues of which may be readily removed by washing or mechanical means without damage to the product, a statement such as "remove residues at harvest by—(stating an effective method of removal)—" will be acceptable. For formulations whose residues cannot be readily removed or where the product would be damaged in the process of removal, but where the residues disappear progressively, directions such as "Do not apply within—(stating a period adequate to reduce residues to a safe level)—days of harvest" will be acceptable. For still other formulations whose residues cannot be readily removed without damage to the product and do not disappear within a reasonable time, a statement such as "Do not apply after edible parts begin to form" may be required. When direc-

tions for use of sprays in food handling establishments are otherwise acceptable, a statement such as "Cover or remove all exposed food, utensils, and containers before spraying" may be required. In order to avoid contamination of milk or meat, certain economic poisons must bear directions against application in dairy barns, to dairy animals, or animals being finished for slaughter, or to forage crops to be used as feed for dairy animals or animals being finished for slaughter. Products which would be used in a manner likely to destroy beneficial insects should bear appropriate directions, such as proper timing of application to avoid destruction of pollinating insects. Products which might be injurious to fish and wildlife after extensive use or indiscriminate disposal of excess material or spray-tank washings, and which bear directions for widespread use in areas where contamination of waterways would be possible, should bear directions such as "To protect fish and wildlife, do not contaminate streams, lakes, or ponds with this material." Herbicides which might be used in a manner likely to cause injury to beneficial vegetation should carry directions warning against the danger of drifting of dusts, spray mist, or vapors from volatile ingredients.

(3) In general, the presence on the label of either the skull and crossbones and the word "Poison" or the warning "May Be Fatal If Swallowed" will substitute for such precautionary statements as "Avoid contamination of food" and "Keep away from children and domestic animals."

(4) Fire hazard cautions shall be based on the flash point of the particular products. The manufacturer of a formulation should determine the flash point of his product and label it accordingly. For formulations having flash points at or below 20° F. by the Taglabue Open-Cup Method, a statement such as "Danger—Extremely flammable! Keep away from fire, sparks, and heated surfaces" should be used. For flash points above 20° F. but not over 80° F., "Warning—Flammable! Keep away from heat and open flame" would be appropriate. For flash points above 80° F. but not over 150° F., the caution "Do not use or store near heat or open flame" would be acceptable.

(5) Antidote statements must contain emergency first aid instructions suitable for use by a layman. In most cases they should require only materials which are readily available.

(6) It is permissible and usually advisable for a manufacturer of an economic poison to submit facsimiles of proposed labeling to the Pesticides Regulation Division, Environmental Protection Agency, Washington, D.C. 20250, for review and tentative acceptance before he invests in new printed labels.

(d) *Acceptable warning, caution and antidote statements for economic poisons containing specified ingredients.* The following subparagraphs set forth or indicate acceptable warning, caution and antidote statements for economic poisons containing the ingredients speci-

fied therein. The exact wording used in the suggested statements is not obligatory, although the substance of all such statements will be required, unless under special conditions of handling or use it is unnecessary. The manufacturer is obligated to use any added warning, caution or antidote statements which any special characteristics or uses of his formulation indicate to be necessary. Where the notation (H.P.) for "household package" appears following a precautionary statement, it indicates that the warning will be required only on packages commonly stored or used in the household where there is greater danger of accidents involving children or pets. The insignia

☒ Poison ☒

always refers to the skull and crossbones and the word "Poison" (in red) on a contrasting background. The fire hazard caution prescribed in this paragraph in each case is based on the flash point of the chemical named.

Acetone—50% and above.

Caution: Extremely Flammable! Keep away from fire, sparks, and heated surfaces. Avoid prolonged breathing of vapor. Avoid prolonged or repeated contact with skin.

NOTE: For formulations containing low percentages the signal word and flammability warning may be reduced on the basis of actual flash point determinations.

3 (2-Acetonylfurfuryl)-4-hydroxycoumarin (Fumarin) and salts—(1) Above 3%. Treat as Warfarin (4).

(ii) Concentrations from 0.1% to 3% inclusive. Treat as Warfarin (ii).

(iii) Finished baits. Treat as Warfarin (iii).

Acrylonitrile (Technical).

☒ Poison ☒

Antidotes: Carry victim to fresh air. Have him lie down. Remove contaminated clothing, but keep victim warm. Start treatment immediately. Call a Physician Immediately!

If inhaled. Break an amyl nitrite pearl in a cloth and hold lightly under nose for 15 seconds; repeat five times at about 15 second intervals. Give artificial respiration if breathing has stopped.

If swallowed. Break an amyl nitrite pearl in a cloth and hold lightly under nose for 15 seconds. If victim is conscious, or when consciousness returns, give one tablespoonful of salt in a glass of warm water, and repeat until vomit fluid is clear. Repeat amyl nitrite five times at about 15 second intervals. Give artificial respiration if breathing has stopped.

Never Give Anything by Mouth to an Unconscious Person!

Warning: Poisonous Liquid and Vapor! Flammable! Do not breathe vapor. Do not get in eyes, on skin, or on clothing. Keep away from heat and open flames. Keep container closed.

NOTE: Directions for use should include instructions for appropriate respiratory protection.

Aldrin (95% hexachloro hexahydro-endo, exo-dimethano naphthalene)—(1) 60% and above.

☒ Poison ☒

Antidotes: If swallowed. Give a tablespoonful of salt in a glass of warm water and

repeat until vomit fluid is clear. Have victim lie down and keep quiet. Call a Physician Immediately!

If on skin. Wash immediately with soap and water.

Warning: Poisonous If Swallowed, Inhaled or Absorbed Through Skin! Do not breathe dust or spray mist. Do not get in eyes, on skin or on clothing. In case of contact immediately remove contaminated clothing and flush skin or eyes with plenty of water; for eyes, get medical attention. Wash thoroughly with soap and water after handling and before eating or smoking; wear clean clothing. During commercial or prolonged exposure in spray-mixing and loading operations, wear clean synthetic rubber gloves and a mask or respirator of a type passed by the U.S. Department of Agriculture for aldrin protection. Do not apply or allow to drift to areas occupied by unprotected humans or beneficial animals. To protect fish and wildlife, do not contaminate streams, lakes or ponds with this material.

(ii) 10% to 60%.

Warning: Hazardous If Swallowed, Inhaled, or Absorbed Through Skin! Do not breathe dust or spray mist. Do not get in eyes, on skin or on clothing. In case of contact, immediately remove contaminated clothing and flush skin or eyes with plenty of water; for eyes, get medical attention. Wash thoroughly with soap and water after handling and before eating or smoking; wear clean clothing. During commercial or prolonged exposure in spray-mixing and loading operations, wear clean synthetic rubber gloves and a mask or respirator of a type passed by the U.S. Department of Agriculture for aldrin protection. Do not apply or allow to drift to areas occupied by unprotected humans or beneficial animals. To protect fish and wildlife, do not contaminate streams, lakes or ponds with this material.

(iii) Below 10%.

Caution: Harmful if swallowed, inhaled or absorbed through skin. Avoid breathing of dust or spray mist. Avoid contact with skin, eyes or clothing. In case of contact with skin or eyes, flush with plenty of water; for eyes, get medical attention. Wash with soap and water after handling and before eating or smoking; wear clean clothing. Avoid contamination of feed and foodstuffs. Do not apply or allow to drift to areas occupied by unprotected humans or beneficial animals. To protect fish and wildlife, do not contaminate streams, lakes or ponds with this material.

(iv) Fertilizer formulations.

Caution: Avoid prolonged or repeated inhalation of dust or contact with skin. Wash thoroughly after handling. To protect fish and wildlife, do not use where runoff will contaminate streams, lakes or ponds.

Allethrin. To be acceptable for registration for the usual uses, no precautionary labeling is required on the basis of this ingredient alone.

Allyl alcohol—(1) Technical.

⊗ Poison ⊗

Antidotes: If swallowed. Give a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Have victim lie down and keep quiet. Call a Physician Immediately!

If on skin. In case of contact, remove contaminated clothing and immediately wash skin with soap and water.

Warning: Poisonous If Swallowed, Inhaled, or Absorbed Through Skin! Rapidly Absorbed Through Skin! Do not get in eyes, on skin or on clothing. Do not breathe vapor. Use with adequate ventilation. Wear rubber gloves and goggles. In case of contact, immediately remove contaminated

clothing including shoes and flush skin or eyes with plenty of water; for eyes, get medical attention. Wash thoroughly with soap and water after handling and before eating or smoking. During commercial or prolonged exposure in spray-mixing and loading operations, wear a mask or respirator of a type adequate against organic vapors and gases. Do not store near feed and food products. Do not reuse shoes or clothing until free of all contamination. Do not apply or allow to drift to areas occupied by unprotected humans or beneficial animals.

(ii) Aerosols-greenhouse use.

⊗ Poison ⊗

Antidotes: Internal. Give a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Have victim lie down and keep quiet. Call a Physician Immediately!

If on skin. Wash thoroughly with soap and water.

Warning: Poisonous If Inhaled or Absorbed Through Skin! Do not get on skin. Use only while wearing a mask or respirator of a type adequate against organic vapors and gases. Wear protective clothing and natural rubber gloves. Wash hands, arms and face with soap and water after using the bomb. Wash contaminated clothing with soap and hot water before reuse. Do not store near food and feed products.

Alpha naphthyl thiourea—(1) 30% and above.

⊗ Poison ⊗

Antidote: Give a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Have victim lie down and keep quiet. Call a Physician Immediately!

Warning: Keep dogs, cats, hogs and chickens away from baited areas.

(ii) Below 30%.

Warning: Keep away from children and domestic animals. Avoid contamination of feed and foodstuffs.

Ammonium sulfamate. To be acceptable for registration for the usual uses, no precautionary labeling is required on the basis of this ingredient alone.

Antimony potassium tartrate (tartar emetic)—(1) 10% and above.

Warning: May be fatal if swallowed. Do not breathe dust. Wash thoroughly after handling.

(ii) Below 10%.

Caution: Harmful if swallowed. Avoid breathing dust. Wash thoroughly after handling. Keep away from children and domestic animals. Avoid contamination of feed and foodstuffs.

Arsenic compounds. Inorganic insoluble including calcium arsenate, lead arsenate, magnesium arsenate, paris green, london purple. Inorganic soluble including arsenous oxide, sodium arsenate, sodium arsenite.

(1) Inorganic insoluble 50% and above; inorganic soluble 5% and above.

⊗ Poison ⊗

Antidote: Give a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Then give 2 tablespoonfuls of Epsom Salt or Milk of Magnesia in water, and plenty of milk and water. Have victim lie down and keep quiet. Call a Physician Immediately!

Warning: Poisonous If swallowed. Avoid contact with skin, eyes, or clothing. Wash thoroughly after using. Avoid breathing dust or spray mist.

(ii) Inorganic insoluble 10% to 50%; inorganic soluble 1% to 5%.

Warning: May be Fatal If Swallowed! Avoid contact with skin, eyes, or clothing.

Wash thoroughly after using. Avoid breathing dust or spray mist.

(iii) Inorganic insoluble below 10 percent; inorganic soluble below 1 percent.

Caution: Harmful if swallowed. Avoid prolonged breathing of dust or spray mist. Avoid contamination of feed and foodstuffs. Keep away from children and domestic animals.

(iv) Formulations for use as herbicides require an additional statement:

Caution: Keep children and animals off treated areas.

Arsenates (except calcium propyl arsenate)—(1) all effective concentrations.

Caution: Harmful if swallowed. Avoid contact with skin. Avoid breathing dust or spray mist. Wash hands after using. Avoid storage near food and feed products. Keep away from children and domestic animals.

(ii) Calcium propylarsenate, all effective concentrations. Treat as arsenic compounds (ii). (See subparagraph (9)(ii) of this paragraph.)

Azobenzene.

Caution: Harmful if swallowed or inhaled! Avoid breathing fumes or dust. Avoid contamination of feed and foodstuffs. Keep away from children and domestic animals.

Benzene—15 percent and above.

Caution: Extremely Flammable! Keep away from fire, sparks, and heated surfaces. Avoid prolonged breathing of vapor. Avoid prolonged contact with skin.

Note: For formulations containing low percentages the signal word and flammability warning may be reduced on the basis of actual flash point determinations.

Benzene hexachloride (hexachlorocyclohexane, BHC)—(1) BHC and dry formulations 25% and above.

Caution: Harmful If Swallowed! May be Absorbed Through Skin! May produce irritation of skin and eyes. Do not breathe dust or spray mist. Avoid contact with skin and eyes. Wash thoroughly after handling. Avoid contamination of feed and foodstuffs.

(ii) Dry formulations below 25%.

Caution: May be absorbed through the skin. Avoid prolonged breathing of dust or spray mist. Avoid contact with skin and eyes. Wash thoroughly after handling. Avoid contamination of feed and foodstuffs.

(iii) Solutions and emulsions 25% and above.

Caution: Harmful If Swallowed! May be Absorbed Through Skin! May produce irritation of skin or eyes. Do not breathe spray mist. Avoid contact with skin and eyes. In case of contact, wash immediately with soap and water; for eyes, flush with water and get medical attention. Avoid contamination of feed and foodstuffs. Do not use on household pets or humans.

(iv) Solutions and emulsions below 25%.

Caution: May be absorbed through skin. Avoid inhalation of spray mist. Avoid skin contact. In case of contact, wash immediately with soap and water. Avoid contamination of feed and foodstuffs. Do not use on household pets or humans.

Bis (chlorophenyl)-2,2,2-trichloroethanol (Kelthane)—(1) technical emulsions and wettable powders above 25%.

Caution: Harmful if swallowed. Avoid skin contact with solutions. In case of skin contact, wash with soap and water. Avoid breathing dust and spray mist. Avoid storage near feed and food products.

(ii) Emulsifiable or petroleum oil solutions for agricultural and industrial use, 25% and below.

Caution: Avoid contact with skin. In case of skin contact, wash with soap and water. Avoid breathing spray mist. Avoid storage near feed and food products.

(iii) *Dust and wettable powder formulations 25% and below.*

Caution: Avoid breathing dust. Avoid storage near feed and food products.

Eis (tri-n-butyltin) oxide and salts—(1) Above 30%.

Warning: May Be Fatal If Swallowed! May be absorbed through skin. Causes skin irritation. Do not breathe spray mist. Do not get in eyes, on skin or on clothing. In case of skin contact, remove contaminated clothing and immediately wash skin with soap and water; for eyes, immediately flush with plenty of water. If irritation persists, get medical attention. Wash contaminated clothing before reuse. Avoid storage near food and feed products.

(ii) 5% to 30%.

Caution: Harmful if swallowed. May be absorbed through skin. Causes skin irritation. Avoid breathing spray mist. Do not get in eyes, on skin or on clothing. In case of skin contact, remove contaminated clothing and immediately wash skin with soap and water; for eyes, immediately flush with plenty of water. If irritation persists, get medical attention. Wash contaminated clothing before reuse. Avoid storage near food and feed products.

(iii) Below 5%.

Caution: Harmful if swallowed. May be absorbed through skin. Causes skin irritation. Avoid breathing spray mist. Avoid contact with skin, eyes or clothing. In case of contact, immediately remove contaminated clothing and wash skin with soap and water; for eyes, flush with plenty of water and get medical attention. Wash clothing before reuse. Avoid storage near feed and food products.

Boric acid—20% and above.

Caution: Avoid contamination of feed and foodstuffs. Keep away from children and domestic animals.

Cadmium formulations, each to be considered on own merits—(1) If found "highly toxic" under the Act.

o Poison o
x x

Antidote: Give a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Then give 2 tablespoonfuls of Epsom Salt or Milk of Magnesia in water and plenty of milk or water. Have victim lie down and keep warm. Call a Physician Immediately!

Warning: May Be Fatal If Swallowed! Do not get in eyes or on skin. Do not breathe dust or spray mist. Wash thoroughly after handling.

(ii) If formulation is not "highly toxic" under the Act, appropriate warnings must be used.

Calcium cyanamide.

Caution: Harmful if swallowed. May cause skin and eye irritation. Avoid contact with skin and eyes. Avoid breathing dust. In case of eye contact, flush with plenty of water and get medical attention. After skin contact, cleanse with a bland oil such as corn or mineral oil, followed by soap and water. Avoid storage near food or feed products.

Captan (n-trichloromethylmercapto-2-cyclohexenedicarboximide).

Caution: Avoid inhalation of dust or spray mist. Avoid prolonged or repeated contact with skin. Avoid contamination of feed and foodstuffs.

2-carbomethoxy-1-methylvinyl dimethyl phosphate (a-isomer) (Phosdrin)—(1) Above 2% (except aerosols, see below).

o Poison o
x x

Antidotes: If swallowed. Give a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Have

victim lie down and keep quiet. Call a Physician Immediately!

If on skin. Remove contaminated clothing and wash skin immediately with soap and water. Call a Physician Immediately!

Warning: Poisonous If Swallowed, Inhaled, or Absorbed Through Skin or Eyes! Rapidly Absorbed Through Skin! Do not get in eyes or on skin. Wear natural rubber gloves, protective clothing and goggles. In case of contact wash immediately with soap and water. Wear a mask or respirator of a type passed by the U.S. Department of Agriculture for phosdrin protection. Keep all unprotected persons and animals out of operating areas or vicinity where there may be danger of drift. Vacated areas should not be reentered on the day of treatment. Do not store near feed and food products. Wash hands, arms and face thoroughly with soap and water before eating or smoking. Wash all contaminated clothing with soap and hot water before reuse.

(ii) *Dusts, 2% and below.*

Warning: May Be Fatal If Swallowed, Inhaled, or Absorbed Through Skin! Rapidly Absorbed Through Skin! Do not get in eyes, on skin, or on clothing. Wear natural rubber gloves, protective clothing and goggles. In case of contact wash immediately with soap and water. Wear a mask or respirator of a type passed by the U.S. Department of Agriculture for phosdrin protection. Keep all unprotected persons out of operating areas or vicinity where there may be danger of drift. Vacated areas should not be reentered until drifting insecticide and volatile residues have dissipated. Do not contaminate feed and foodstuffs. Wash hands, arms and face thoroughly with soap and water before eating or smoking. Wash all contaminated clothing with soap and hot water before reuse.

(iii) *Aerosols—greenhouse use.*

o Poison o
x x

Antidotes: Internal. Give a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Have victim lie down and keep quiet. Call a Physician Immediately!

If on skin. Wash thoroughly with soap and water.

Warning: Poisonous If Inhaled or Absorbed Through Skin! Do not get on skin. Use only while wearing a full-face mask of a type passed by the U.S. Department of Agriculture for phosdrin protection. Replace canister as directed. Wear protective clothing and natural rubber gloves. Wash hands, arms, and face with soap and water after using the bomb. Wash contaminated clothing with soap and hot water before reuse. Do not contaminate feed and foodstuffs.

Carbon disulfide—(1) 90% and above.

o Poison o
x x

Antidotes: If inhaled. Get victim into fresh air immediately and give artificial respiration if breathing has stopped. Call a Physician Immediately!

If swallowed. Give ½ cupful medicinal mineral oil. Give large quantities of warm water, and hot tea or coffee. Call a Physician Immediately!

Warning: Poisonous if swallowed or inhaled. Extremely Flammable! Keep away from fire, sparks or heated surfaces. Store in a cool place. Keep container closed. Do not breathe vapor. Do not get in eyes, on skin, or on clothing.

(ii) 10% to 90%.

Warning: Extremely Flammable! May Be Fatal If Inhaled or Swallowed! Keep away from fire, sparks or heated surfaces. Store in a cool place. Keep container

closed. Do not breathe vapor or mist. Avoid contact with eyes, skin or clothing.

(iii) *Below 10%.*

Caution: Extremely Flammable! Harmful by swallowing or inhalation. Avoid contact with eyes, skin or clothing. Keep away from fire, sparks or heated surfaces. Store in a cool place. Keep container closed.

(iv) *Fumigants.*

Warning: Do not reenter treated areas without an airline respirator or a full-face gas mask with a canister for protection against organic vapors.

Carbon tetrachloride—(1) 10% and above.

Caution: Harmful Vapor! Harmful if swallowed. Do not breathe vapor. Avoid prolonged or repeated contact with skin.

(ii) *Fumigants.*

Warning: Do not reenter treated areas without an airline respirator or a full-face gas mask with a canister for protection against organic vapors.

Chlorates (including magnesium or sodium salts)—(1) With fire retardants.

Caution: Harmful if swallowed. Avoid storage near feed and food products.

(ii) *With no fire retardants.*

Caution: Harmful if swallowed. Strong oxidant. Contact with combustible material may cause fire. Clothing and vegetation contaminated with chlorate or its solution are dangerously flammable. Remove clothing and wash thoroughly with water. Store separately from flammable material. Keep away from fire. Avoid storage near feed and food products. Keep animals off treated areas.

Chlordane (octachloro-4,7-methano tetrahydroindane)—(1) Technical chlordane and wettable powders above 25%.

Caution: Harmful if swallowed. Contact with skin causes toxic symptoms. Avoid breathing dust or spray mist. In case of contact with skin, wash with soap and water. Avoid contamination of feed and foodstuffs.

(ii) *Emulsifiable and petroleum oil solutions for agricultural and industrial use.*

Caution: Harmful if swallowed. Contact with skin can cause toxic symptoms. Avoid breathing spray mist. In case of contact with skin, wash with soap and water. Avoid contamination of feed and foodstuffs.

(iii) *Emulsifiable and petroleum oil solutions and self-propelled wetting sprays for household use.*

Caution: Harmful if swallowed. Repeated or prolonged contact with skin can cause toxic symptoms. In case of contact with skin, wash with soap and water. Avoid breathing spray mist. Avoid contamination of feed and foodstuffs. Keep out of reach of children.

NOTE: See also Interpretation 19 (162.117).

(iv) *Self-propelled sprays for use on animals.*

Caution: Wash hands thoroughly with soap and warm water after handling. Avoid contamination of feed and foodstuffs. Keep out of reach of children. (H.P.)

NOTE: See also paragraph (ii) *Kerosene sprays.*

(v) *Dust and wettable powder formulations 25% and below.*

Caution: Avoid breathing dust or spray mist. Avoid contamination of feed and foodstuffs.

NOTE: See also Interpretation 19 (162.117).

2-Chloro-4-ethylamino-6-isopropylamino-s-triazine (Atrazine).

Caution: Harmful if swallowed. Avoid inhalation of dust. Avoid storage near feed and food products.

Chloroform—10% and above.

Caution: Harmful Vapor! Harmful if swallowed. Avoid prolonged breathing of vapor.

Avoid prolonged or repeated contact with skin.

p-Chlorophenyl phenyl sulfone—Wettable powder containing 28% named compound and 12% related compounds.

Caution: Avoid prolonged or repeated inhalation of dust. Avoid contamination of feed and foodstuffs.

Chloropirrin.

○ Poison ○
x

Antidote: If inhaled. Get victim into fresh air. Have him lie down and keep warm and quiet. Give artificial respiration if breathing has stopped. Call a Physician Immediately!

Warning: Poisonous Vapor! Do not breathe vapor. Do not get in eyes, on skin, or on clothing. In case of contact, immediately flush skin or eyes with plenty of water for at least 15 minutes; for eyes, get medical attention. Remove and wash clothing before reuse.

NOTE: Directions for use should include directions for appropriate respiratory protection.

Coal tar creosote—containing less than 5% phenols.

Caution: May cause skin irritation. Avoid prolonged or repeated contact with skin. Avoid prolonged breathing of vapor.

Coal tar disinfectants. Treat on the basis of percentage of phenols.

Copper compounds—10% and above (based on the percentage of elemental copper present).

Caution: Harmful if swallowed! Cresols and cresylic acids. Refer to phenols.

Citronella, oil of.

Caution: Harmful if swallowed. Keep out of reach of children.

Cryolite (sodium fluoaluminate). To be acceptable for registration for the usual uses, no precautionary labeling is required on the basis of this ingredient alone.

Cyanide—(1) Calcium cyanide, 5% and above.

○ Poison ○
x

Antidotes: Carry victim to fresh air. Have him lie down. Remove contaminated clothing but keep victim warm. Start treatment immediately. Call a Physician Immediately!

If inhaled. Break an amyl nitrite pearl in a cloth and hold lightly under nose for 15 seconds. Repeat five times at about fifteen second intervals. Give artificial respiration if breathing has stopped.

If swallowed. Break an amyl nitrite pearl in a cloth and hold lightly under nose for 15 seconds. If victim is conscious or when consciousness returns, give a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Repeat inhalation of amyl nitrite five times at 15 second intervals. Give artificial respiration if breathing has stopped.

Never give anything by mouth to an unconscious person!

Warning: Liberates Poison Gas: Do not breathe vapor or dust. Do not get in eyes or on skin. Keep away from acids. Wash thoroughly after handling.

NOTE: Directions for indoor use should include appropriate mask protection.

(1) Inorganic cyanides (except Ca (CN)₂ and liquid HCN) 5% and above.

○ Poison ○
x

Antidotes: Carry victim to fresh air. Have him lie down. Remove contaminated clothing but keep victim warm. Start treatment immediately. Call a Physician Immediately!

If inhaled. Break an amyl nitrite pearl in a cloth and hold lightly under nose for

15 seconds. Repeat five times at about 15 second intervals. Give artificial respiration if breathing has stopped.

If swallowed. Break an amyl nitrite pearl in a cloth and hold lightly under nose for 15 seconds. If victim is conscious or when consciousness returns, give a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Repeat inhalation of amyl nitrite five times at 15 second intervals. Give artificial respiration if breathing has stopped.

Never give anything by mouth to an unconscious person!

Warning: Contact with Acid Liberates Poison Gas! Do not breathe vapor or dust. Do not get in eyes or on skin. Wash thoroughly after handling.

NOTE: Directions for indoor use should include appropriate mask protection.

(11) Inorganic cyanides below 5%.

Warning: Contact with Acid Liberates Poison Gas! May be fatal if inhaled or swallowed. Do not breathe vapor or dust. Do not allow to come in contact with skin or eyes. Wash thoroughly after using.

(iv) Liquid HCN (hydrocyanic acid).

○ Poison ○
x

Antidotes: Carry victim to fresh air. Have him lie down. Remove contaminated clothing but keep victim warm. Start treatment immediately. Call a Physician Immediately!

If inhaled. Break an amyl nitrite pearl in a cloth and hold lightly under nose for 15 seconds. Repeat five times at about 15 second intervals. Give artificial respiration if breathing has stopped.

If swallowed. Break an amyl nitrite pearl in a cloth and hold lightly under nose for 15 seconds. If victim is conscious or when consciousness returns, give a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Repeat inhalation of amyl nitrite five times at 15 second intervals. Give artificial respiration if breathing has stopped.

Never give anything by mouth to an unconscious person!

Warning: Poison Gas! Flammable! Do not breathe gas. Do not get in eyes, on skin, or on clothing. In case of contact remove contaminated clothing and wash thoroughly. Keep away from heat and open flame.

NOTE: Directions for use should include appropriate gas mask protection.

Dalapon (2,2-dichloropropionic acid) and salts—20% and above.

Caution: Causes eye irritation. May cause skin irritation. Avoid contact with eyes, skin, or clothing. In case of contact, flush with plenty of water for at least 15 minutes; for eyes, get medical attention. Wash clothing before reuse.

Demeton 0,0-diethyl 0 (and S)-2-(ethylthio) ethyl phosphorothioates—(1) 2% and above.

○ Poison ○
x

Antidotes: If swallowed. Give a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Have victim lie down and keep quiet. Call a Physician Immediately!

If on skin. Remove contaminated clothing and wash skin immediately with soap and water.

Warning: Poisonous If Swallowed, Inhaled, Or Absorbed Through Skin! Rapidly Absorbed Through Skin! Do not get in eyes or on skin. Wear protective clothing, natural rubber gloves, and goggles. In case of contact, remove contaminated clothing and wash skin immediately with soap and water. Do not breathe fumes, dust, or spray mist.

Wear a mask or respirator of a type passed by the U.S. Department of Agriculture for protection against this material. Do not contaminate feed or foodstuffs. Keep all unprotected persons out of the operating area or vicinity where there may be danger of drift. Vacated areas should not be reentered until the drifting insecticide and volatile residues have dissipated. Wash hands, arms and face thoroughly with soap and warm water before eating or smoking. Wash all contaminated clothing with soap and hot water before reuse.

(1) Below 2%.
Warning: May Be Fatal If Swallowed, Inhaled, or Absorbed Through Skin! Rapidly Absorbed Through Skin! Do not get in eyes or on skin. Wear protective clothing, natural rubber gloves, and goggles. In case of contact, remove contaminated clothing and wash skin immediately with soap and water. Do not breathe fumes, dust, or spray mist. Wear a mask or respirator of a type passed by the U.S. Department of Agriculture for protection against this material. Do not contaminate feed or foodstuffs. Keep all unprotected persons out of the operating area or vicinity where there may be danger of drift. Vacated areas should not be reentered until the drifting insecticides and volatile residues have dissipated. Wash hands, arms, and face thoroughly with soap and water before eating or smoking. Wash all contaminated clothing with soap and water before reuse.

1,2-Dibromo-2,2-dichloroethyl dimethyl phosphate (Dibron)—(1) Liquid concentrates.

Caution: Harmful if swallowed. Concentrate may cause skin damage. Do not get in eyes, on skin, or on clothing. Avoid breathing spray mist. Use waterproof gloves and face shield or goggles when handling concentrate. In case of contact, immediately remove contaminated clothing and flush skin or eyes with plenty of water; for eyes, get medical attention. Avoid storage near feed and food products.

(1) All dust formulations.
Caution: Harmful if swallowed. May cause irritation of eyes, nose, and throat. Avoid breathing dust. Avoid contact with skin and eyes. Wash thoroughly after handling. Avoid storage near feed and food products.

Dibutyl succinate. No precautionary labeling is required on the basis of this ingredient alone.

Dichloro: Dichloro-naphthoquinone.
Caution: May cause skin irritation. Avoid prolonged and repeated contact with skin. Avoid inhalation of dust. Wear protective clothing. Wash with soap and water after using. Avoid storage near feed and food products.

Dichloro diphenyl dichloroethane. Treat on same basis as DDT.

Dichloro diphenyl trichloroethane (DDT)—(1) Technical, emulsions, and wettable powders above 25%.

Caution: Harmful if swallowed. Avoid skin contact with solutions. In case of skin contact, wash with soap and water. Avoid breathing dust and spray mist. Avoid contamination of feed and foodstuffs.

(1) Emulsifiable or petroleum oil solutions for agricultural and industrial use 25% and below.

Caution: Avoid contact with skin. In case of skin contact, wash with soap and water. Avoid breathing spray mist. Avoid contamination of feed and foodstuffs.

(11) Emulsifiable or petroleum oil solutions for household use.

Caution: Harmful if swallowed. Avoid contact with skin. Avoid prolonged breathing of spray mist. Wash with soap and water after using. Avoid contamination of

feed and foodstuffs. Remove birds, pets, and fish bowls from rooms being sprayed. Keep out of reach of children.

NOTE: See also Interpretation 15 (162.113).

(iv) *Self-propelled sprays.*

Caution: Do not spray on skin or animals. Wash with soap and water after using. Avoid inhalation of mist. Avoid contamination of feed and foodstuffs. Remove birds, pets, and fish bowls from rooms being sprayed. Keep out of reach of children.

NOTE: See also Interpretation 15 (162.113).

(v) *Dust and wettable powder formulations 25% and below.*

Caution: Avoid breathing dust. Avoid contamination of feed and foodstuffs.

Dichloroethyl ether—(1) 10% and above. Warning: May Be Fatal If Inhaled, Swallowed, or Absorbed Through Skin! Do not breathe vapor or spray mist. In case of contact remove contaminated clothing and wash immediately with soap and water.

(ii) *Below 10%.*

Caution: Harmful if inhaled, swallowed, or absorbed through skin! Avoid inhalation of vapor or spray mist. Avoid contact with skin or clothing and wash thoroughly after using. Keep away from children and domestic animals (H. P.).

2,4-Dichlorophenoxyacetic acid (2,4-D)—(1) *2,4-D acid and inorganic salts*—20% and above.

Caution: Avoid inhaling dust. Avoid contact with skin, eyes, or clothing.

(ii) *Organic esters and amine salts.*

Caution: Avoid contact with skin, eyes, or clothing.

NOTE: Added warning statements regarding danger to crops through drifting dusts sprays, or vapors should be used on all labels of 2,4-D formulations.

2,4-Dichlorophenyl ester of benzene sulfonic acid—50% emulsifiable concentrate.

Caution: Avoid inhalation of spray mist. Avoid contact with skin.

Di-(p-chlorophenyl) methyl carbinol—(1) 25% and above.

Caution: Harmful if swallowed! Avoid prolonged breathing of vapor or spray mist. Do not get in eyes or on skin. Wash thoroughly after using. Do not contaminate feed and foodstuffs. Keep away from children and domestic animals.

(ii) *Below 25%.*

Caution: Harmful if swallowed! Avoid contact with skin or eyes. Wash thoroughly after using. Avoid contamination of feed and foodstuffs.

Dichloropropene-dichloropropane and related C₃ hydrocarbons (D-D mixture).

Warning: Hazardous Vapor and Liquid! May Be Fatal If Swallowed, Inhaled or Absorbed Through Skin. Causes burns of skin and eyes. Do not get in eyes, or skin, or on clothing. Wear polyethylene gloves and goggles when handling material. Do not breathe vapor. In case of accidental spillage indoors, have available a self-contained breathing apparatus or a mask or respirator of a type passed by the U.S. Department of Agriculture for chlorinated C₃ hydrocarbon protection. In case of contact immediately remove contaminated clothing, including shoes, and wash with soap and water; for eyes, flush with plenty of water and get medical attention. Wash thoroughly after handling and before eating or smoking. Wash clothing and air shoes thoroughly before reuse. Do not store near feed or food products. To protect fish and wildlife, do not contaminate streams, lakes, or ponds with this material.

Dieldrin (85% hexachloro epoxy octa-hydro-endo, exo-dimethano naphthalene)—(1) 80% and above. Treat as aldrin.

(ii) 10% to 60%. Treat as aldrin.

(iii) *Below 10% for agricultural use.* Treat as aldrin.

(iv) *Fertilizer formulations.* Treat as aldrin.

(v) *0.5% self-propelled sprays or solutions and 1.0% dusts for household use.*

Caution: Avoid prolonged or repeated inhalation of dust or spray mist or contact with skin. Do not contaminate foods, utensils, dishes or drinking water. Do not apply to humans, pets, or birds, or near fish bowls. Keep out of reach of children.

NOTE: See also kerosene sprays.

O,O-Diethyl O-(2-isopropyl-6-methyl-4-pyrimidinyl) Phosphorothioate (Diazinon)—(1) 15% and above.

Warning: May be fatal if swallowed. May be absorbed through skin. Do not breathe dust or spray mist. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Avoid storage near food and feed products.

(ii) *Below 15%.*

Caution: Harmful if swallowed. May be absorbed through skin. Avoid breathing dust or spray mist. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Avoid storage near food and feed products. Keep out of reach of children. (H. P.)

(iii) *0.5% self-propelled sprays or solutions and 1.0% dust for household use.*

Caution: Harmful if swallowed. Avoid prolonged breathing of dust or spray mist. Avoid prolonged and repeated contact with skin; wash thoroughly after using. Avoid contamination of food and feed products. Keep out of reach of children.

Diethyl diphenyl dichloroethane (Perthane)—(1) *Technical, emulsions and wettable powders above 25%.*

Caution: Harmful if swallowed. Avoid skin contact with solutions. In case of skin contact, wash with soap and water. Avoid breathing dust and spray mist. Avoid storage near feed and food products.

(ii) *Emulsifiable or petroleum oil solutions for agricultural and industrial use, 25% and below.*

Caution: Avoid contact with skin. In case of skin contact, wash with soap and water. Avoid breathing spray mist. Avoid storage near feed and food products.

(iii) *Emulsifiable or petroleum oil solutions for household use.*

Caution: Harmful if swallowed. Avoid contact with skin. Avoid prolonged breathing of spray mist. Wash with soap and water after using. Avoid contamination of feed bowls from rooms being sprayed. Keep out of reach of children.

NOTE: See also Interpretation 15 (162.113).

(iv) *Self-propelled sprays.*

Caution: Do not spray on skin or animals. Wash with soap and water after using. Avoid inhalation of mist. Avoid contamination of feed and foodstuffs. Remove birds, pets and fish bowls from rooms being sprayed. Keep out of reach of children.

NOTE: See also Interpretation 15 (162.113).

(v) *Dust and wettable powder formulations, 25% and below.*

Caution: Avoid breathing dust. Avoid storage near feed and food products.

N,N-Diethyl toluamide—(1) 40% and above.

Caution: Harmful if swallowed. Avoid contact with eyes and lips. Keep out of reach of children.

(ii) *Below 40%.*

Caution: Avoid contact with eyes and lips. *1,2-Dihydropyridiazine-3,6-dione (maleic hydrazide).* To be acceptable for registration

for the usual uses, no precautionary labeling is required on the basis of this ingredient alone.

O,O-Dimethyl-S-p-chlorophenylthiomethyl phosphorodithioate (methyl trithion).

Warning: May be fatal if swallowed, inhaled, or absorbed through skin. Do not get in eyes, on skin, or on clothing. Do not breathe dust or spray mist. In case of contact, wash immediately with soap and water. Wear clean clothing. Wash all contaminated clothing with soap and hot water before reuse. Do not store near feed and food products. To protect fish and wildlife, do not contaminate streams, lakes, or ponds with this material.

O,O-Dimethyl-O, p-nitrophenyl thiophosphate. Treat on same basis as parathion.

O,O-Dimethyl S-[4-oxo-1,2,3-benzotriazin-3 (4H) ylmethyl] phosphorodithioate (Guthion)—(1) Above 2%.

☒ Poison ☒

Antidotes: If swallowed. Give a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Have victim lie down and keep quiet. Call a Physician Immediately!

If on skin. In case of contact remove contaminated clothing and immediately wash skin with soap and water.

Warning: Poisonous If Swallowed, Inhaled, or Absorbed Through Skin! Do not get in eyes or on skin. Wear natural rubber gloves, protective clothing and goggles. In case of contact, wash immediately with soap and water. Wear a mask or respirator of a type passed by the U.S. Department of Agriculture for guthion protection. Keep all unprotected persons out of operating areas or vicinity where there may be danger of drift. Vacated areas should not be reentered for at least two days. Do not store near feed and food products. Wash hands, arms, and face thoroughly with soap and water before eating or smoking. Wash all contaminated clothing with soap and hot water before reuse.

(ii) *Dusts, 2% and below.*

Warning: May Be Fatal If Swallowed, Inhaled, or Absorbed Through Skin! Do not get in eyes or on skin. Wear natural rubber gloves, protective clothing and goggles. In case of contact wash immediately with soap and water. Wear a mask or respirator of a type passed by the U.S. Department of Agriculture for guthion protection. Keep all unprotected persons out of operating areas or vicinity where there may be danger of drift. Vacated areas should not be reentered for at least two days. Do not store near feed and food products. Wash hands, arms, and face thoroughly with soap and water before eating or smoking. Wash all contaminated clothing with soap and hot water before reuse.

Distiro ortho cresol—(1) 10% and above.

☒ Poison ☒

Antidote: Give a teaspoonful of baking soda in a glass of warm water and repeat until vomiting occurs. Call a Physician Immediately.

Warning: Poisonous If Swallowed Or Absorbed Through Skin! Do not breathe vapor, dust, or spray mist. Do not get in eyes, on skin, or on clothing. In case of contact, remove clothing and wash thoroughly with soap and water; for eyes, flush with water and get medical attention.

(ii) *From 2% to 10%.*

Warning: May Be Fatal If Swallowed Or Absorbed Through Skin! Do not breathe vapor or spray mist. Do not get in eyes, on skin, or on clothing. In case of contact, remove clothing and wash thoroughly with soap and water; for eyes, flush with water and get medical attention.

(iii) Below 2%.

Caution: Harmful if swallowed. Avoid breathing vapor or spray mist. Avoid contact with skin, eyes, or clothing. Wash thoroughly after using.

Diphacinone (2-diphenylacetyl-1,3-indandione) and salts—(i) Above 3%. Treat as warfarin (i).

(ii) Concentrations from 0.1% to 3%, inclusive. Treat as warfarin (ii).

(iii) Finished baits. Treat as warfarin (iii).

Di-n-propyl maleate isosafrole condensate (n-propyl isomer). To be acceptable for registration for the usual uses, no precautionary labeling is required on the basis of this ingredient alone.

Disodium ethylene bisdithiocarbamate (Nabam)—3% and above.

Caution: May be harmful if swallowed. May cause skin irritation. Avoid contact with skin and eyes. In case of contact, flush with plenty of water; for eyes, get medical attention.

Diuron (dichlorophenyl dimethylurea).

Caution: May cause irritation of eyes, nose, throat and skin. Avoid breathing dust or spray mist. Avoid contact with skin, eyes, and clothing.

Endrin (hexachloro-epoxy-octahydro-endo, endo-dimethano naphthalene)—(i) 2.5% and above.

⊗ Poison ⊗

Antidotes: If swallowed. Give a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Have victim lie down and keep quiet. Call a Physician Immediately!

If on skin. Wash immediately with soap and water.

Warning: Poisonous by Swallowing, Inhalation, or Skin Contact! Do not get in eyes, on skin, or on clothing. Do not breathe dust or spray mist. In case of contact, immediately remove all contaminated clothing and flush skin or eyes with plenty of water for at least 15 minutes; for eyes, get medical attention. Wear clean synthetic rubber gloves and a mask or respirator of a type passed by the U.S. Department of Agriculture for endrin protection. Wash thoroughly with soap and water after handling and before eating or smoking; wear clean clothing. Do not apply or allow to drift to areas occupied by unprotected humans or beneficial animals. Do not contaminate feed and foodstuffs. To protect fish and wildlife, do not contaminate streams, lakes, or ponds with this material.

(ii) Below 2.5%.

Warning: Hazardous by Swallowing, Inhalation, or Skin Contact! Rapidly Absorbed Through Skin! Do not get in eyes, on skin, or on clothing. Do not breathe dust or spray mist. In case of contact with skin or eyes, flush with plenty of water; for eyes, get medical attention. Wash thoroughly with soap and water after handling and before eating or smoking; wear clean clothing. Wear clean synthetic rubber gloves and a mask or respirator of a type passed by the U.S. Department of Agriculture for endrin protection. Do not apply or allow to drift to areas occupied by unprotected humans or beneficial animals. Do not contaminate feed and foodstuffs. To protect fish and wildlife, do not contaminate streams, lakes, or ponds with this material.

Ethion (O,O',O'-tetraethyl S,S'-methylene bis phosphorodithioate)—(i) 50% and above.

Warning: May be fatal if swallowed, inhaled or absorbed through skin. Do not breathe vapor, dust or spray mist. Do not get in eyes, on skin, or on clothing. In case of skin contact, wash with soap and water; for eyes, flush with plenty of water and get

medical attention. Wash clothing with soap and hot water before reuse. Do not store near food and feed products.

(ii) 15% to 50%.

Warning: May be fatal if swallowed. Absorbed through skin. Do not breathe vapor, dust or spray mist. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Avoid storage near food and feed products.

Ferbam: ferric dimethyl dithiocarbamate—3% and above.

Caution: May cause irritation of eyes, nose, throat and skin! Avoid breathing dust or spray mist. Avoid contact with eyes, skin, or clothing. In case of contact, flush with plenty of water; for eyes, get medical attention.

Note: For dust mixture 50% and above, add: Keep away from fire and sparks.

Fluorides—(i) Inorganic, water soluble fluorides 10% and above.

Warning: May Be Fatal If Swallowed! Do not breathe dust. Do not contaminate feed and foodstuffs. Keep out of reach of children and domestic animals.

(ii) Inorganic, water soluble fluorides, below 10%.

Caution: Harmful if Swallowed! Avoid prolonged breathing of dust. Avoid contamination of feed and foodstuffs. Keep away from children and domestic animals.

(iii) Fluosilicates, 5% and above.

Caution: Harmful if Swallowed! Avoid prolonged breathing of dust or spray mist. Avoid contamination of feed and foodstuffs. Keep away from children and domestic animals.

Formaldehyde solutions—(i) 4% and above.

⊗ Poison ⊗

Antidote: Give a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Give milk, or white of egg beaten with water. Call a Physician Immediately!

(iii) Below 15%.

Caution: Harmful if swallowed. May be absorbed through skin. Avoid breathing dust or spray mist. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Avoid storage near food and feed products. Keep out of reach of children (H.P.).

Ethyl bromide—10% and above.

Caution: Harmful Vapor! Avoid prolonged breathing of vapor. Do not use or store near heat or open flame.

Ethylene dibromide—10% and above.

Caution: Harmful by Inhalation, swallowing or skin contact. Avoid breathing vapor. Do not get in eyes, on skin, or on clothing. In case of contact immediately remove clothing, including shoes, and flush skin or eyes with plenty of water for at least 15 minutes; for eyes, get medical attention. Wash clothing and air shoes thoroughly before reuse.

Ethylene dichloride—10% and above.

Warning: Flammable! Harmful if inhaled or swallowed! Keep away from heat and open flame. Avoid breathing vapor. Avoid contact with skin, eyes, and clothing.

Fenturon (phenyl dimethylurea).

Caution: May cause irritation of eyes, nose, throat, and skin. Avoid breathing dust or spray mist. Avoid contact with skin, eyes, and clothing.

Warning: Causes Irritation of Skin, Eyes, Nose and Throat! Do not breathe vapor. Avoid contact with skin, eyes, or clothing. In case of contact, flush with plenty of water; for eyes, get medical attention.

(ii) Below 4%.

Caution: Avoid prolonged breathing of vapor.

Heptachlor—(i) 10% and above.

Warning: May Be Fatal If Swallowed! Do not breathe vapor, dust, or spray mist. Do not get on skin. In case of contact wash immediately with soap and water. Do not contaminate feed and foodstuffs.

(ii) Below 10% for agricultural use.

Caution: Harmful if swallowed. Avoid inhalation of dust or spray mist. Avoid skin contact, and wash hands, arms, and face with soap and water after using. Avoid contamination of feed and foodstuffs.

(iii) Fertilizer formulations.

Caution: Avoid prolonged or repeated inhalation of dust or contact with skin. Wash thoroughly after handling.

Hexachloro-hexahydromethano-2,4,3-benzodioxothiepin oxide (thiodan)—(i) 60% and above. Treat as aldrin (i).

(ii) 10% to 60%. Treat as aldrin (ii).

(iii) Below 10%. Treat as aldrin (iii).

Hexaethyl tetraphosphate. Treat on basis of content of tetraethyl pyrophosphate.

Hydrochloric acid—10% and above (as hydrogen chloride).

Caution: Harmful if swallowed! Do not breathe vapor or fumes. Do not get in eyes, on skin, or on clothing.

Note: The word "Poison" together with an internal and external antidote statement as previously required under the Federal Cautious Poisons Act may be used.

Hypochlorites (sodium and potassium hypochlorite solutions)—10% and above.

Caution: Harmful if Swallowed!

Note: The word "Poison" together with an internal and external antidote statement as previously required under the Federal Cautious Poisons Act may be used.

Isopropyl N-(3-chlorophenyl) carbamate (CIPC)—50% and above.

Caution: Harmful if Swallowed!

Isopropyl N-phenyl carbamate (IPC)—50% and above.

Caution: Harmful if Swallowed!

2-Isouvaleryl-1,3-indandione (FMP) and salts—(i) Above 6%. Treat as Warfarin (i).

(ii) Concentrations from 0.1% to 6%, inclusive. Treat as Warfarin (ii).

(iii) Finished baits. Treat as Warfarin (iii).

Kerosene sprays (or similar formulations containing other petroleum distillates)—(i) When sold for household use.

Caution: Harmful if Swallowed! Keep out of reach of children. Do not use or store near heat or open flame.

(ii) When recommended for use on animals.

Caution: Avoid wetting the hides of animals. Do not use or store near heat or open flame.

Lime-sulfur solutions.

To be acceptable for registration for the usual uses, no precautionary labeling is required on the basis of this ingredient alone.

Lindane (gamma isomer of benzene hexachloride 99% and above)—(i) Dry formulations for agricultural use, 25% and above.

Warning: May be Fatal If Swallowed! May Be Absorbed Through Skin! Do not breathe dust or spray mist. Avoid contact with skin and eyes. Wash thoroughly after handling. Avoid contamination of feed and foodstuffs.

(ii) Dry formulations below 25%.

Caution: May Be Absorbed Through Skin! Avoid prolonged breathing of dust or spray mist. Avoid contact with skin and eyes. Wash thoroughly after handling. Avoid contamination of feed and foodstuffs. Harmful if swallowed (H.P.). Keep out of reach of children (H.P.).

(iii) Solutions and emulsions 25% and above.

Warning: May Be Fatal If Swallowed! May Be Absorbed Through Skin! Do not breathe spray mist. Avoid contact with skin or eyes. In case of contact, wash immediately with soap and water; for eyes, flush with water and get medical attention. Avoid contamination of feed and foodstuffs. Do not use on household pets or humans. (iv) *Self-propelled sprays, solutions and emulsions below 25%.*

Caution: May be absorbed through skin. Avoid breathing spray mist. Avoid contact with skin. In case of contact, wash immediately with soap and water. Avoid contamination of feed and foodstuffs. Do not use on household pets or humans. Harmful if swallowed (H.P.). Keep out of reach of children (H.P.).

(v) *Dusts suitable for use on animals.* Caution: May Cause Irritation Of Nose Wash thoroughly after handling. Avoid contamination of feed and foodstuffs.

Malathion (O,O-Dimethyl dithiophosphate of diethylmercaptosuccinate).

Caution: Harmful if swallowed. Avoid prolonged breathing of dust or spray mist. Avoid prolonged or repeated contact with skin; wash thoroughly after using. Avoid contamination of feed and foodstuffs. Keep out of reach of children (H.P.).

Note: For dusts and wettable powders below 20% the caution "Harmful if swallowed" may be omitted.

(Maneb (manganese ethylenebisdithiocarbamate)—10% and above.

Caution: May be absorbed through skin. And Throat! Do not breathe dust or spray mist.

Note: For dust mixtures 50% and above, add: Keep away from fire and sparks.

Mercury compounds—(1) Inorganic salts (except calomel)—20% and above (based on the percentage of elemental mercury present).

o Poison o
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Antidote: Give milk or white of egg beaten with water, then a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Repeat milk or white of egg beaten with water. Call A Physician Immediately!

Warning: Do not breathe dust. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling.

(ii) *Inorganic salts—below 20% (based on the percentage of elemental mercury present).*

Warning: May Be Fatal If Swallowed! Do not breathe dust. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling.

(iii) *Organic salts.* Due to wide variation in characteristics each product must be considered individually. See also phenyl mercuric acetate.

Mercury, metallic (in ointments)—(1) 20% and above.

o Poison o
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Antidote: Give milk, or white of egg beaten with water, then a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Repeat milk or white of egg beaten with water. Call A Physician Immediately!

Warning: May produce irritation of skin and eyes. Application to large areas of skin may cause serious mercury poisoning.

(ii) *Below 20%.* Warning: May cause irritation of skin and eyes. Application to large areas of skin may cause serious mercury poisoning.

Metaldhyde (technical). Warning: May be fatal if swallowed. Harmful dust. Avoid breathing dust and

vapor. Avoid contact with skin, eyes, and clothing.

Methoxychlor (2,2-bis[p-methoxyphenyl]-1,1,1-trichloroethane). To be acceptable for registration for the usual uses, no precautionary labeling is required on the basis of this ingredient alone.

Methyl bromide (Technical).

o Poison o
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Antidote: Remove victim to fresh air immediately. Keep victim lying down and warm. Give artificial respiration if breathing has stopped. Call A Physician Immediately!

Warning: Poisonous Liquid and Vapor! Contact with liquid may produce burns. Do not breathe vapor. Wear a full-face gas mask with black canister meeting specifications of the U.S. Bureau of Mines for organic vapors. Do not get in eyes, on skin, or on clothing. In case of contact, immediately remove all contaminated clothing including shoes. Wash skin thoroughly with soap and water and flush eyes with water for at least 15 minutes. Get medical attention. Do not reuse shoes or clothing until free of all contamination.

Methylene chloride (Technical).

Warning: Flammable! May Be Fatal If Inhaled. Contact with liquid may produce burns. Do not breathe vapor. Do not get in eyes or on skin. Do not use or store near heat or open flame.

2-Methyl 4-chlorophenoxyacetic acid—(1) Acid and salts—20% and above.

Caution: Avoid inhaling dust. Avoid contact with skin, eyes, or clothing.

(ii) *Organic esters and amine salts.*

Caution: Avoid contact with skin, eyes, or clothing.

Note: Added warning statements regarding danger to crops through drifting dusts, sprays, or vapors should be used on all labels of 2-Methyl 4-chlorophenoxyacetic acid formulations.

Methylene chloride—(1) Technical.

Caution: Harmful if swallowed! Avoid prolonged or repeated breathing of vapor. Avoid prolonged or repeated contact with skin.

(ii) *Self-propelled sprays.*

Caution: Avoid prolonged or repeated breathing of vapor. Avoid prolonged or repeated contact with skin. Keep out of reach of children.

Monuron 3-(p-chlorophenyl)-1,1-dimethylurea.

Caution: May cause irritation of eyes, nose, throat, and skin. Avoid breathing dust or spray mist. Avoid contact with skin, eyes, and clothing.

1-Naphthyl N-methylcarbamate (Sevin)—(1) Above 50%.

Caution: Harmful if swallowed or inhaled. Avoid breathing of dust or spray mist. Avoid prolonged or repeated contact with skin; wash thoroughly after handling. Wear clean clothing. Avoid storage near feed and food products.

(ii) *50% and below.*

Caution: Harmful if swallowed. Avoid prolonged breathing of dust or spray mist. Avoid prolonged or repeated contact with skin; wash thoroughly after using. Avoid storage near feed and food products. Keep out of reach of children (H.P.).

N-1 Naphthyl phthalamic acid. To be acceptable for registration for the usual uses, no precautionary labeling is required on the basis of this ingredient alone.

Neburon 1-Butyl-3-(3,4-dichlorophenyl)-1-methylurea.

Caution: May cause irritation of eyes, nose, throat, and skin. Avoid breathing dust or

spray mist. Avoid contact with skin, eyes, and clothing.

Nicotine and its salts—(1) 5% and above.

o Poison o
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Antidote: Give a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Have victim lie down and keep warm. Give strong tea or coffee. Give artificial respiration if breathing has stopped. Call a Physician Immediately!

Warning: Poisonous by Swallowing, Inhalation or Skin Contact! Do not breathe vapor, dust or spray mist. Do not get in eyes, on skin or on clothing. In case of contact, immediately flush skin or eyes with plenty of water for at least 15 minutes; for eyes, get medical attention. Remove and wash clothing before reuse.

Note: Directions for use should include instructions for appropriate respiratory protection.

(ii) *1% to 5% solutions, and 2% to 5% dusts.*

Warning: May Be Fatal If Swallowed, Inhaled or Absorbed Through Skin! Do not breathe vapor, dust or spray mist. Avoid contact with eyes, skin or clothing. In case of contact, flush with plenty of water; for eyes, get medical attention.

Note: Directions for use should include instructions for appropriate respiratory protection.

(iii) *Solutions below 1%.*

Caution: Harmful If Swallowed! Avoid breathing vapor, or spray mist. Avoid contact with eyes, skin, or clothing. Avoid contamination of feed and foodstuffs. Keep away from children.

(iv) *Dusts below 2%.*

Caution: Irritating Dust!
Nitrobenzene (oil of Mirbane)—(1) 25% and above.

o Poison o
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Antidotes: If swallowed. Give a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear.

External. Wash thoroughly with soap and warm water. Call A Physician Immediately!

Warning: Poisonous If Swallowed Or Absorbed Through Skin! Do not breathe vapor, fumes or spray mist. Do not get in eyes, on skin or on clothing.

(ii) *Below 25%.*

Warning: May Be Fatal If Swallowed Or Absorbed Through Skin! Do not breathe vapor, fumes or spray mist. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling.

2-Nitro-1,1-bis (p-chlorophenyl) butane or 2-Nitro-1,1-bis (p-chlorophenyl) propane (Dilan), or mixtures of these—(1) 25% and above.

Caution: May Cause Irritation Of Skin and Eyes! May Be Absorbed Through Skin! In case of contact, wash skin thoroughly with warm water and soap; for eyes, wash with running water for 15 minutes and get medical attention. Avoid contamination of feed and foodstuffs.

(ii) *Below 25%.*

Caution: May cause irritation of skin and eyes! May be absorbed through skin! Avoid prolonged breathing of dust or spray mist. Avoid contamination of feed and foodstuffs. Wash thoroughly after using.

Octyl-bicyclo-heptene-dicarboximide. To be acceptable for registration for the usual uses, no precautionary labeling is required on the basis of this ingredient alone.

N-Octylsulfonate of isosafrole. To be acceptable for registration for the usual uses, no precautionary labeling is required on the basis of this ingredient alone.

Orthodichlorobenzene—10% and above.
 Caution: Avoid prolonged breathing of vapor. Avoid contact with eyes, skin, or clothing. Wash thoroughly after using.
Ouz (*p*-chlorophenyl-*p*-chlorobenzene sulfonate)—(1) *Wettable powder, 50% and above.*

Caution: May cause skin irritation. Avoid prolonged or repeated contact with skin. Avoid inhaling dust or spray mist.

(ii) *Aerosols, 10%, and above, with methyl chloride as propellant.*

Warning: Flammable! May Be Fatal If Inhaled! Do not use or store near heat or open flame. Use only while using a full-face mask with canister approved by the U.S. Bureau of Mines for organic vapors. Wash hands, arms, and face immediately after using.

Paints, containing insecticides, fungicides, etc. Treat as oil solutions, emulsions or on basis of formulation toxicity.

Paradichlorobenzene—Use in vacuum cleaner attachments.

Caution: Avoid prolonged breathing of vapor and spray. Avoid contact with eyes. Rooms with treated furniture should be well ventilated before occupancy.

Parathion (O,O-Diethyl O,p-nitrophenyl thiophosphate)—(1) Above 2% (except aerosols; see below).

⊙ Poison ⊙
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Antidotes: If swallowed. Give a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Have victim lie down and keep quiet. Call a Physician Immediately!

If on skin. In case of contact remove contaminated clothing and immediately wash skin with soap and water.

Warning: Poisonous If Swallowed, Inhaled, or Absorbed Through Skin! Rapidly Absorbed Through Skin! Do not get in eyes, on skin, or on clothing. Wear natural rubber gloves, protective clothing and goggles. In case of contact, wash immediately with soap and water. Wear a mask or respirator of a type passed by the U.S. Department of Agriculture for parathion protection. Keep all unprotected persons out of operating areas or vicinity where there may be danger of drift. Vacated areas should not be reentered until drifting insecticide and volatile residues have dissipated. Do not contaminate feed and foodstuffs. Wash hands, arms, and face thoroughly with soap and water before eating or smoking. Wash all contaminated clothing with soap and hot water before reuse.

(ii) *Dusts, 2% and below.*

Warning: May Be Fatal If Swallowed, Inhaled, or Absorbed Through Skin! Rapidly Absorbed Through Skin! Do not get in eyes, on skin, or on clothing. Wear natural rubber gloves, protective clothing and goggles. In case of contact wash immediately with soap and water. Wear a mask or respirator of a type passed by the U.S. Department of Agriculture for parathion protection. Keep all unprotected persons out of operating areas or vicinity where there may be danger of drift. Vacated areas should not be reentered until drifting insecticide and volatile residues have dissipated. Do not contaminate feed and foodstuffs. Wash hands, arms, and face thoroughly with soap and water before eating or smoking. Wash all contaminated clothing with soap and hot water before reuse.

(iii) *Aerosols—greenhouse use.*

⊙ Poison ⊙
x

Antidotes: Internal. Give a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Have victim lie

down and keep quiet. Call a Physician Immediately!

If on skin. Wash thoroughly with soap and water.

Warning: Poisonous If Inhaled or Absorbed Through Skin! Do not get on skin. Use only while wearing a full-face mask of a type passed by the U.S. Department of Agriculture for parathion protection. Replace canister as directed. Wear protective clothing and natural rubber gloves. Wash hands, arms and face with soap and water after using the bomb. Wash contaminated clothing with soap and hot water before reuse. Do not contaminate feed and foodstuffs.

Pentachlorophenol—(1) 5% and above (except oil solutions or emulsions).

Caution: Harmful if inhaled or swallowed! Do not breathe dust. Avoid contact with eyes, skin or clothing. Wash thoroughly after handling.

(ii) *Oil solutions or emulsions 3% and above.*

Caution: Harmful if swallowed or absorbed through skin! Causes skin irritation! Do not breathe vapor or spray mist. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling.

(iii) **Sodium pentachlorophenate—3% and above.**

Caution: Causes skin irritation. Harmful if swallowed. Do not breathe dust or spray mist. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling.
Peroxyacetic acid—For a 40% aqueous solution.

Warning: Oxidizing Agent! May Be Fatal If Swallowed! May produce severe burns. Store in a cool place away from combustible material. Avoid inhalation of vapor or contact of the undiluted material with the skin. Wear rubber gloves when handling the concentrate. In case of contact, wash thoroughly with plenty of water.

Phenols (including phenol, cresol, cresylic acid). The following will be considered as minimum precautionary labeling except that, where there is adequate evidence of presence of alkyl substitutions greater than one methyl group, lower requirements may be permitted on the basis of evidence submitted as to reduce toxicity.

(i) *10% and above.*

Warning: May Be Fatal If Swallowed or Absorbed Through Skin! May Produce Severe Burns! Do not get in eyes, on skin, or on clothing. Avoid breathing spray mist. Wash thoroughly after handling.

(ii) *2% to 10%.*

Caution: Harmful if Swallowed! Avoid contact with skin, eyes and clothing. Avoid breathing spray mist. Avoid contamination of feed and foodstuffs (H.P.). Keep away from children and domestic animals.

(iii) **Chlorophenyl phenol and sodium o-phenyl phenate 5% and above.**

Caution: Harmful if Swallowed!

Note: The word "Poison" together with an internal and external antidote statement as previously required under the Federal Caustic Poisons Act may be used.

Phenylmercuric acetate—(1) 5% and above.

⊙ Poison ⊙
x

Antidotes: If swallowed. Give milk or white of egg beaten with water, then a tablespoonful of salt in a glass of warm water, and repeat until vomit fluid is clear. Repeat milk or white of egg beaten with water. Call a Physician Immediately!

If on skin. Wash immediately with soap and warm water.

If in eyes. Flush with water for at least 15 minutes, and get medical attention.

Warning: May Produce Delayed Chemical Burns! Do not breathe dust or spray mist. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling.

(ii) *Below 5%.*

Warning: May Be Fatal If Swallowed! May Produce Delayed Chemical Burns! Do not breathe dust or spray mist. Do not get in eyes, on skin or on clothing. In case of contact, wash skin with soap and water; for eyes, flush with water for at least 15 minutes, and get medical attention. Wash thoroughly after handling.

Note: See also Mercury compounds, Organic salts (iii).

Phorate (O,O-diethyl-S-(ethylthiomethyl) phosphorodithioate).

⊙ Poison ⊙
x

Antidotes: If swallowed. Give a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Have victim lie down and keep quiet. Call a Physician Immediately!

If on skin. In case of contact, remove contaminated clothing and immediately wash skin with soap and water.

Warning: Poisonous If Swallowed, Inhaled, or Absorbed Through Skin! Rapidly Absorbed Through Skin! Do not get in eyes or on skin. Wear natural rubber gloves, protective clothing and goggles. In case of contact, wash immediately with soap and water. Wear a mask or respirator of a type passed by the U.S. Department of Agriculture for phorate protection. Keep all unprotected persons out of operating areas or vicinity where there may be danger of drift. Vacated areas should not be reentered until drifting insecticides and volatile residues have dissipated. Do not store near feed and food products. Wash hands, arms, and face thoroughly with soap and water before eating or smoking. Wash all contaminated clothing with soap and hot water before reuse.

Phosphamidon (chloro diethylcarbamoyl methylvinyl dimethyl phosphate)—(i) Above 2%.

⊙ Poison ⊙
x

Antidotes: If swallowed. Give a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Have victim lie down and keep quiet. Call a Physician Immediately!

If on skin. Remove contaminated clothing and immediately wash skin with soap and water.

Warning: Poisonous If Swallowed, Inhaled, or Absorbed Through Skin! Rapidly Absorbed Through Skin! Do not get in eyes or on skin. Wear natural rubber gloves, protective clothing and goggles. In case of contact, wash immediately with soap and water. Wear a mask or respirator of a type passed by the U.S. Department of Agriculture for phosphamidon protection. Keep all unprotected persons out of operating areas or vicinity where there may be danger of drift. Vacated areas should not be reentered until drifting insecticide and volatile residues have dissipated. Do not store near feed and food products. Wash hands, arms, and face thoroughly with soap and water before eating or smoking. Wash all contaminated clothing with soap and hot water before reuse.

(ii) *Dusts, 2% and below.*

Warning: May Be Fatal If Swallowed, Inhaled, or Absorbed Through Skin! Rapidly Absorbed Through Skin! Do not get in eyes or on skin. Wear natural rubber gloves, protective clothing and goggles. In case of contact wash immediately with soap and water. Wear a mask or respirator of a type

passed by the U.S. Department of Agriculture for phosphamidon protection. Keep all unprotected persons out of operating areas or vicinity where there may be danger of drift. Vacated areas should not be reentered until drifting insecticide and volatile residues have dissipated. Do not store near feed and food products. Wash hands, arms, and face thoroughly with soap and water before eating or smoking. Wash all contaminated clothing with soap and hot water before reuse.

Phosphorus (white or yellow)—(1) 1% and above.

° Poison °
x x

Antidote: Internal. Give one tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Follow by eight tablespoonfuls of medicinal mineral oil. (Not salad or vegetable oils). Have victim lie down and keep warm. Call a Physician Immediately!

Warning: Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Do not breathe fumes.

(1) Below 1%.

Warning: May Be Fatal If Swallowed! Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Do not breathe fumes. Keep away from children and domestic animals.

Pine Oil. To be acceptable for registration for the usual uses, no precautionary labeling is required on the basis of this ingredient alone.

Piperonyl butoxide. To be acceptable for registration for the usual uses, no precautionary labeling is required on the basis of this ingredient alone.

Piperonyl cyclonene. To be acceptable for registration for the usual uses, no precautionary labeling is required on the basis of this ingredient alone.

2-Pivalyl-1,3-indandione (Pival) and Salts—(1) Above 3%. Treat as warfarin (1).

(2) Concentrations from 0.1% to 3%, inclusive. Treat as warfarin (2).

(3) Finished baits. Treat as warfarin (3).

Potassium cyanate.

Caution: Avoid breathing dust or spray mist. Avoid prolonged or repeated contact with skin. Wash thoroughly after using. Avoid storage near feed and food products.

Pyrethrins. To be acceptable for registration for the usual uses, no precautionary labeling is required on the basis of this ingredient alone.

Quaternary ammonium compounds—(1) 10% and above.

Caution: Harmful if swallowed. Avoid contact with skin and eyes. In case of contact flush with plenty of water. Avoid contamination of food.

(2) Below 10%.

Caution: Avoid contamination of food.
(3) Formulations having hazards requiring more caution statements. Quaternary formulations having hazards requiring more caution statements than those indicated in subdivisions (1) and (2) of this subparagraph must be considered individually.

Red squill powder and extracts; any effective concentrations.

Caution: Avoid contamination of feed and foodstuffs. Keep away from children and domestic animals.

Ronnel [O,O-dimethyl O-(2,4,5-trichlorophenyl) phosphorothioate]—(1) Above 5%.

Caution: Harmful if swallowed. Irritating to the skin and eyes. Do not get in eyes. Avoid prolonged and repeated contact with skin. Avoid prolonged breathing of dust or spray mist. Wash with soap and water after using. Avoid storage near feed and

foodstuffs. Keep out of reach of children (H.P.).

(2) 5% and below.

Caution: Harmful if swallowed. Avoid prolonged breathing of spray mist. Avoid prolonged and repeated contact with skin. Wash thoroughly after using. Avoid contamination of feed and foodstuffs. Remove bird cages and fish bowls from rooms being sprayed (H.P.). Keep out of reach of children (H.P.).

(3) Feed supplements.

Caution: Avoid prolonged or repeated contact with skin. Wash thoroughly after using. Avoid storage near feed and food products.

Rotenone. To be acceptable for registration for the usual uses, no precautionary labeling is required on the basis of this ingredient alone.

Sabadilla powder.

Caution: Avoid breathing dust.

Selenites and selenates—(1) 3% and above.

° Poison °
x x

Antidote: Give a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Have victim lie down and keep warm. Call a Physician Immediately!

Warning: Do not breathe dust or spray mist. Do not use on or around plants to be used for food. Keep away from children and domestic animals.

(2) Below 3%.

Warning: May Be Fatal If Swallowed! Do not breathe dust or spray mist. Keep away from children and domestic animals. Do not use on or around plants to be used for food.

Sesamin. To be acceptable for registration for the usual uses, no precautionary labeling is required on the basis of this ingredient alone.

Simazine (2-chloro-4,6-bis [ethylamino]-s-triazine). To be acceptable for registration for the usual uses, no precautionary labeling is required on the basis of this ingredient alone.

Sodium fluoroacetate (1080); any concentration.

° Poison °
x x

Antidote: If swallowed. Speed is essential. Immediately give a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Then give two tablespoonfuls of Epsom Salt in water. Have victim lie down and keep warm and quiet. Call a Physician Immediately!

Warning: For use By Trained Operators Only! Poisonous If Swallowed! May cause secondary poisoning in other animals, so pick up and burn or bury deeply all carcasses of pests killed by 1080. Burn all surplus bait or bait containers. Keep pets and domestic animals confined away from baited areas. Do not contaminate feed and foodstuffs. Keep out of reach of children.

Sodium isopropyl xanthate—50% and above.

Caution: Irritating dust. Avoid breathing dust. Avoid contact with skin and eyes.

Sodium o-phenyl phenate. See under phenols.

Sodium trichloroacetate.

Caution: May cause burns. Avoid breathing spray mist. Avoid contact with skin, eyes, and clothing. In case of contact, immediately wash skin with plenty of water; for eyes, wash with water for at least 15 minutes and get medical attention.

Sorbic acid. To be acceptable for registration for the usual uses, no precautionary labeling is required on the basis of this ingredient alone.

Strychnine and its salts.

° Poison °
x x

Antidote: If less than ten minutes has passed since the poison was taken, give a tablespoonful of salt in a glass of warm water. Have victim lie down in a quiet, darkened room and keep him warm. Call a Physician Immediately!

Warning: Convulsive Poison! Do not contaminate feed and foodstuffs. Keep away from children and domestic animals.

Sulfur. To be acceptable for registration for the usual uses, no precautionary labeling is required on the basis of this ingredient alone.

Terpene polychlorinates (chlorinated mixture of camphene, pinene and related terpenes, containing 65 to 66% chlorine) (Strobane).

(1) Dry formulations 25% and above. Treat as toxaphene.

(2) Dry formulations below 25%. Treat as toxaphene.

(3) Solutions and emulsions. Treat as toxaphene.

(4) Self-propelled sprays. Treat as toxaphene.

2-(p-Tertiary-butyl phenoxy) isopropyl-2-chloroethyl sulfate (Aramite)—(1) Solutions—**Caution:** Harmful if swallowed. Avoid inhalation or spray mist. Do not get on skin, in eyes, or on clothing. Avoid storage near feed and food products.

(2) Wettable powders and dusts.

Caution: Avoid inhalation of dust or spray mist. Do not get on skin, in eyes, or on clothing. Avoid storage near feed and food products.

2,4,5,4-tetrachlorodiphenyl sulfone (Te-dion). To be acceptable for registration for the usual uses, no precautionary labeling is required on the basis of this ingredient alone.

Tetraethyl dithionopyrophosphate. Treat on same basis as tetraethyl pyrophosphate.

Tetraethyl pyrophosphate (TEPP)—(1) 1% and above.

° Poison °
x x

Antidotes: If swallowed. Give a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Have victim lie down and keep warm and quiet. Call a Physician Immediately!

If on skin. Wash with large amounts of soap and water.

Warning: Poisonous If Swallowed, Inhaled, or Absorbed Through Skin or Eyes! Rapidly Absorbed Through Skin or Eyes. Do not breathe spray mist or dust. Avoid skin or eye contact with concentrated spray, or prolonged contact with diluted spray. Wear a mask or respirator of a type passed by the U.S. Department of Agriculture for tetraethyl pyrophosphate protection. Wear natural rubber gloves, protective clothing and goggles. Keep all unprotected persons out of operational area or vicinity where there may be danger of drift until one hour after spraying or dusting is completed.

(2) Below 1%.

Warning: May Be Fatal If Swallowed, Inhaled, or Absorbed Through Skin or Eyes! Rapidly Absorbed Through Skin! Avoid skin or eye contact with concentrated spray, inhalation of spray mist, or prolonged contact with diluted spray. Wear protective clothing, goggles, and a mask or respirator of a type passed by the U.S. Department of Agriculture for tetraethyl pyrophosphate protection. Remove outer garments and wash face, hands, and arms with soap and water before eating or smoking. Keep all unprotected persons out of operational area or vicinity where there may be danger of drift, until one hour after spraying or dusting is completed.

Thallium compounds—(1) 1% and above.

⊗ Poison ⊗

Antidote: Give a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Have victim lie down and keep warm. Call a Physician Immediately!

Warning: Cumulative Poison! Absorbed through the skin. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Keep children and domestic animals away from baited areas and burn all pests killed.

(II) Below 1%.

Warning: May Be Fatal If Swallowed or Absorbed Through Skin! Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Do not contaminate feed and foodstuffs. Keep children and domestic animals away from baited areas and burn all pests killed.

NOTE: See also Interpretation 22 (162.120).

Thiram (Tetramethylthiuramdisulfide)—20% and above.

Caution: May cause skin irritation. Do not inhale dust. Do not get in eyes or on skin. Wash thoroughly after handling.

Thiocyanates—(1) *B*-butoxy *B'*-thiocyano diethyl ether—25% concentrate.

Warning: Harmful if swallowed or absorbed through skin. Do not get in eyes, on skin or on clothing. Wash thoroughly after handling. Do not breathe spray mist.

(II) *B*-butoxy *B'*-thiocyano diethyl ether—3% to 25% concentrate.

Caution: Avoid prolonged contact with skin. Avoid prolonged inhalation of spray mist. Avoid contamination of feed and foodstuffs. (H.P.)

(III) *B*-thiocyano ethyl esters of mixed fatty acids averaging 10 to 18 carbon atoms, 13.2% of *B*-butoxy *B'*-thiocyano diethyl ether—25% concentrate.

Caution: Avoid prolonged contact with skin. Avoid prolonged inhalation of spray mist. Avoid contamination of feed and foodstuffs. (H.P.)

Toxaphene (chlorinated camphene containing 67 to 69% chlorine)—(1) Dry formulations 25% and above.

Warning: May Be Fatal If Swallowed! Do not breathe dust or spray mist. Do not get in eyes, on skin or on clothing. Wash thoroughly after using. Do not store near feed and food products. To protect fish and wildlife, do not contaminate streams, lakes, or ponds with this material.

(II) Dry formulations below 25%.

Caution: Harmful If Swallowed! Avoid prolonged breathing of dust or spray mist. Avoid contact with eyes, skin and clothing. Wash thoroughly after using. Avoid storage near feed and food products. To protect fish and wildlife, do not contaminate streams, lakes, or ponds with this material.

(III) Solutions and emulsions. Labels should bear precautionary statements covering the combined hazards of toxaphene and solvent.

(IV) Self-propelled sprays.

Caution: Do not spray on skin, or animals. Wash with soap and water after using. Avoid inhalation of mist. Avoid contamination of feed and foodstuffs. Remove birds, pets, and fish bowls from rooms being sprayed. Keep out of reach of children.

Trichloroacetic acid.

Caution: Causes Burns! Harmful if swallowed. Avoid breathing spray mist. Avoid contact with eyes, skin, and clothing. In cases of contact, immediately wash skin with plenty of soap and water; for eyes, wash with water for at least 15 minutes and get medical attention.

***N*-trichloromethyl thiophthalimide (phal-tan).**

Caution: Avoid inhalation of dust or spray mist. Avoid prolonged or repeated contact with skin. Avoid storage near feed and food products.

2,4,5-Trichlorophenoxyacetic acid (2,4,5-T)—(1) 2,4,5-T acid and inorganic salts—20% and above.

Caution: Avoid inhaling dust. Avoid contact with skin, eyes, or clothing.

(II) Organic esters and amine salts.
Caution: Avoid contact with skin, eyes, or clothing.

NOTE: Added warning statements regarding danger to crops through drifting dusts, spray, or vapors should be used on all labels of 2,4,5-T formulations.

Warfarin (3-[alpha-acetonylbenzyl]-4-hydroxycoumarin) and salts—(1) Above 3%.

⊗ Poison ⊗

Antidote: Give a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Call a Physician Immediately!

Warning: Keep away from humans, domestic animals and pets. If swallowed by humans, domestic animals, or pets, this material may reduce the clotting ability of the blood and cause bleeding. In such case, intravenous and oral administration of Vitamin K combined with blood transfusions are indicated as in the case of hemorrhage caused by overdoses of bishydroxycoumarin.

(II) Concentrations from 0.1% to 3%, inclusive.

Caution: Keep away from humans, domestic animals, and pets. If swallowed by humans, domestic animals, or pets, this material may reduce the clotting ability of the blood and cause bleeding. In such case, intravenous and oral administration of Vitamin K combined with blood transfusions are indicated as in the case of hemorrhage caused by overdoses of bishydroxycoumarin.

Directions for use should include a statement directing placement of baits so as to protect humans, pets, and domestic animals.

(III) Finished baits.—The only requirement is the statement directing placement of baits so as to protect humans, pets, and domestic animals; however, voluntary use of precautionary labeling similar to that required under subdivision (II) of this subparagraph would not be objectionable.

Zinc phosphide—(1) 10% and above.

⊗ Poison ⊗

Antidote: Give a tablespoonful of salt in a glass of warm water and repeat until vomit fluid is clear. Have victim lie down and keep warm. Call a Physician Immediately!

Warning: Do not breathe dust or fumes. Avoid contact with skin. Wash hands after using. Do not contaminate feed and foodstuffs. Keep away from children and domestic animals.

(II) 2% to 10%.

Warning: May Be Fatal If Swallowed! Do not breathe dust or fumes. Avoid contact with skin. Wash hands after using. Do not contaminate feed and foodstuffs. Keep away from children and domestic animals.

(III) Below 2%.

Caution: Harmful If Swallowed! Avoid breathing dust or fumes. Avoid contact with skin. Wash hands after using. Avoid contamination of feed and foodstuffs. (H.P.) Keep away from children and domestic animals.

NOTE: Rodenticide use, hand broadcast, wear rubber gloves.

Zinc salts—not elsewhere included—(considered as zinc, not as anions)—5% and above.

Caution: Harmful if swallowed.
Zineb (zinc ethylene bisdithiocarbamate)—10% and above.

Caution: May Cause Irritation of Nose and Throat! Do not breathe dust or spray mist.

NOTE: For dust mixtures 50% and above, add: Keep away from fire and sparks.

Ziram (zinc dimethyl dithiocarbamate)—3% and above.

Caution: May Be Harmful If Swallowed or Inhaled! May cause irritation of eyes, nose, throat, and skin. Avoid contact with eyes, skin, or clothing. Avoid breathing dust or spray mist. In case of contact, flush with plenty of water; for eyes, get medical attention.

NOTE: For dust mixtures 50% and above, add: Keep away from fire and sparks.

§ 162.117 Interpretation with respect to labeling of household insecticides containing chlordane.

In determining whether household insecticides containing chlordane comply with the requirements of the Federal Insecticide, Fungicide, and Rodenticide Act, the following principles will apply:

(a) **Permissible uses.** Products containing chlordane intended for use in and around human dwellings shall not be deemed to comply with the act unless their labeling shows that where they are intended for use inside of premises, they are to be used only against one or more of the following pests: roaches, waterbugs, silverfish, ants, brown dog ticks, carpet beetles, houseflies, wasps, mosquitoes, box elder bugs, crickets, scorpions, and clothes moths (under restricted directions as hereinafter stipulated), or such other pests as the Director may find to be controlled effectively by one or more of the specified formulations when applied in a manner otherwise compatible with proper usage.

(b) **Permissible formulations.** (1) Most household insecticides containing chlordane fall into the following four general classes:

(i) Petroleum distillate (kerosene) solutions which may or may not contain limited quantities of other chlorinated hydrocarbon insecticides and certain paralytic agents.

(ii) Water emulsions which do not ordinarily contain any other insecticidal ingredients and which are to be used undiluted, or emulsifiable concentrates to be used after suitable dilutions with water.

(iii) Dry powder formulations based on talc, pyrophyllite or other suitable diluents, which sometimes contain limited quantities of other insecticides.

(iv) Pressurized dispensers usually of the 12-ounce size which ordinarily contain 2 percent of chlordane by weight and may not contain more than 3 percent by weight. Other chlorinated hydrocarbon insecticides may be substituted for a part of the chlordane as long as the relative hazard to human health of the mixture is no greater than that of one containing 3 percent chlordane by weight. Acceptable self-propelled sprays must deliver a coarse, wet spray.

In addition, there are a few other special products which contain chlordane.

(2) Petroleum distillate spray formulations frequently contain 2 percent chlordane by weight without any other residual toxicant. Under certain circumstances less than 3 percent chlordane by weight may be used. However, the chlordane content of these formulations shall not exceed 3 percent by weight. If other chlorinated hydrocarbon insecticides are present which have additive toxicities, the hazard of the mixed formulation shall not exceed that of one containing a maximum of 3 percent chlordane by weight as the only chlorinated hydrocarbon insecticide present.

(3) Water emulsion formulations when diluted for use shall not contain more than 3 percent chlordane by weight without any other chlorinated residual toxicant. Under certain circumstances less than 2 percent chlordane by weight may be used. However, the chlordane content in these formulations shall not exceed 3 percent by weight. If other chlorinated hydrocarbon insecticides are present which have additive toxicities, the hazard of the mixed formulation shall not exceed that of one containing a maximum of 3 percent chlordane by weight.

(4) Dry powder formulations of chlordane based on talc, pyrophyllite or other suitable dry diluents shall not contain more than 6 percent chlordane by weight. If other chlorinated hydrocarbon insecticides are present which have additive toxicities, the hazard of the mixed dry powder shall not exceed that of one containing a maximum of 6 percent chlordane by weight.

(5) Self-propelled sprays must comply with all provisions outlined under subparagraph (1) (iv) of this paragraph.

(6) All formulations referred to above to be accepted must be fully effective when used in accordance with the directions specified on the label.

(c) *Directions for use*—(1) *General*. The directions for liquid formulations and pressurized sprays shall under all circumstances provide for application as a coarse, wet spray or by the use of a paint brush or similar means. Directions for liquid formulations, dry powders, and any other properly formulated mixtures which contain chlordane, either alone or in combination with other toxicants, shall prescribe application in a manner which will treat only infested cracks, surfaces or other areas where the insects rest, run or hide. Directions for use against clothes moths shall set forth the necessary treatment of fabrics. The residual effectiveness of chlordane is dependent on its deposition on desired surfaces or in fabrics. There shall be no claims for spraying in the air or for the use of fine mist sprayers. There shall be no claims or directions which might lead to contamination of foods. There shall be no claims for safety or non-toxicity.

(2) *Particular insects*—(1) *Roaches and waterbugs*. The directions for control of roaches and waterbugs shall provide for thorough spraying, painting or dusting of infested cracks and other hiding places and of adjacent exposed surfaces where roaches and waterbugs will crawl when they come out of hid-

ing. The directions shall indicate that the application should be repeated as often as necessary to maintain effective control.

(ii) *Silverfish*. The directions for control of silverfish shall provide for thorough spraying, painting or dusting of baseboards, areas behind shelving, book cases and storage areas. The directions shall indicate that the application should be repeated as often as necessary to maintain effective control.

(iii) *Ants*. The directions for control of ants shall provide for thorough spraying, painting or dusting of ant trails and areas around door sills and window frames where the pests may enter. The directions should also indicate that it is frequently desirable to treat the openings around water pipes, heat ducts, electrical outlets and baseboards where ants come into rooms from wall spaces and partitions, and that the application should be repeated as often as necessary to maintain effective control.

(iv) *Brown dog ticks*. The directions for control of brown dog ticks shall provide for thorough spraying, painting or dusting of infested areas around baseboards, window and door frames, wall cracks, sleeping quarters of household pets and localized areas of floors and floor coverings. The directions shall indicate that the frequency and extent of applications necessary will depend upon the source and intensity of the infestation. The directions shall also indicate that fresh bedding should be placed in animal quarters following treatment, and that pets or other animals should not be treated with household formulations. Water emulsions not exceeding 0.5 percent chlordane concentration by weight are acceptable for direct application to dogs once in two weeks, or once weekly in the case of water emulsions not exceeding 0.25 percent chlordane concentration by weight.

(v) *Carpet beetles*. The directions for the control of carpet beetles shall provide for a thorough spray, paint, or dust application to infested areas of carpets, localized areas of floors and baseboards, and into cracks and under carpets where these pests may be found. Localized treatments of areas on floors, baseboards and shelves of closets may also be indicated. The directions shall also provide that the application should be repeated as often as necessary to maintain effective control.

(vi) *Houseflies, wasps and mosquitoes*. The directions for the killing of houseflies, wasps, and mosquitoes indoors shall provide for thorough and repeated spraying, painting or dusting of selected surfaces such as doors, around windows and areas frequented by these insects. The directions for killing houseflies, wasps and mosquitoes outdoors and for preventing the entry of these insects into human dwellings should provide for thorough spraying, painting or dusting of screens, window frames, doorsills and selected areas of porches where these insects tend to alight or congregate. The directions should provide also for repeated applications as necessary to obtain the maximum value against these pests since insecticidal residues on the

outside of buildings tend to deteriorate quite rapidly. In the case of wasps, directions may be given to spray or dust the nest with a strong formulation after dark when all of the insects have returned to the nest.

(vii) *Box elder bugs*. The directions for preventing annoyance by box elder bugs should provide for thorough painting, spraying or dusting around doorsills, window frames or wherever these pests may enter the home. The directions should also provide for the direct spraying of any congregation of these insects as soon as it is observed. The directions may indicate that thorough spraying or dusting of areas where these insects crawl or congregate on porches or sides of houses will aid in preventing annoyance by these pests on the outside of dwellings and that effective results against these pests can often be obtained by spraying the infested box elder tree or other host plant with a suitable insecticide.

(viii) *Crickets*. The directions for the control of crickets shall provide for thorough spraying, painting or dusting of baseboards, floors of closets and storage places and other hiding places. The directions shall also indicate that the application should be repeated as often as necessary to maintain effective results.

(ix) *Spiders and centipedes*. The directions for the control of these pests shall provide for thorough spraying or dusting of infested baseboards and corners and of pipes, storage localities and other infested areas in basements. The directions shall indicate that the application should be repeated as often as necessary to maintain effective control.

(x) *Scorpions*. The directions for preventing the entry of scorpions shall provide for thorough spraying, painting or dusting of strong formulations around doorsills, window frames or other areas where these insects may enter the premises. These directions may include limited interior treatment at the places of possible entry. Directions may be given that liberal spraying or dusting of surfaces over which these pests may crawl will aid in controlling these pests in garages and buildings other than human dwellings. The directions should indicate that frequent repeated applications may be necessary, particularly on exterior surfaces exposed to the weather.

(xi) *Clothes moths*. The directions for the protection of clothing, blankets and other woollens from injury by clothes moths should provide for spraying with 2 percent chlordane solution to thoroughly dampen all surfaces. Such directions should also provide that treated articles should be dried and immediately thereafter placed in storage, and that all articles should be dry cleaned before allowing them to be used as clothing or as bedding. Formulations which contain smaller amounts of chlordane may also contain other suitable moth proofing insecticides provided the hazard of the mixed formulation does not exceed that of one containing the maximum concentration of chlordane permitted for such use.

(d) *Ingredient statement provisions.* The following forms of ingredient statements would fulfill the requirements of the Act as to ingredient statements for the four general classes of formulations of household insecticides containing chlordane. These suggested forms of statements assume that chlordane is the only toxicant present and that petroleum distillate in the form of deodorized kerosene is the only other active ingredient.

(1) *Kerosene solutions.*

(i) Active ingredients:	Percent
Technical chlordane ¹	
Petroleum distillate.....	
<hr/>	
Total.....	100
<hr/>	
(ii) Active ingredients:	
Petroleum distillate.....	
Technical chlordane ²	
<hr/>	
Total.....	100

(2) *Water emulsions or dry powders.*

(i) Active ingredients:	
Technical chlordane ¹	
(ii) Inert ingredients.....	
<hr/>	
Total.....	100

(3) *Self-propelled sprays.*

(i) Active ingredients:	
Technical chlordane ¹	
Petroleum distillate.....	
(ii) Inert ingredients.....	
<hr/>	
Total.....	100

¹ Equivalent to -- percent octachloro-4,7-methano tetrahydroindane and -- percent of related compounds.

² Consists of octachloro-4,7-methano tetrahydroindane and related compounds.

The correct percentages should be given in the blank spaces and the sum of the percentage of octachloro-4,7-methano tetrahydroindane and the percentage of related compounds stated should be equal to the percentage of technical chlordane in the product.

(e) *Precautionary labeling provisions.* Precautionary labeling shall conform to the patterns set forth in Interpretation 18, Revision 1, for the various formulations involved. With respect to fire hazard cautions, the following will be acceptable:

Fire hazard. (For use on petroleum distillate solutions only.)

Caution. Do not spray into or near fire or open flame. Do not smoke while spraying.

§ 162.119 Interpretation concerning labeling claims for germicides, disinfectants, and sanitizers recommended for use in hard water areas.

(a) Naturally occurring hard waters act to slow down the rate of germicidal activity in some germicides, disinfectants, and sanitizers recommended for dairy, food plant utensil, and restaurant use, so that they may not perform satisfactorily in all hard water areas when speed of action is a primary requisite to effectiveness. If a manufacturer or distributor submits labeling which contains specific claims and directions for use in hard water areas, such labeling will be accepted for registration only if adequate experimental data are submitted to justify the claims and representations proposed.

(b) To be acceptable for registration, all claims proposed in this connection must be specific. Broad, general, and indefinite claims are likely to be misleading and cannot be accepted.

(c) There is considerable variation in natural hard waters and the precise evaluation of the effects of water hardness on germicides, disinfectants, and sanitizers can best be accomplished by the establishment of acceptable chemical standards of reference for hard water. Therefore, all products for which claims for effectiveness in hard waters are made in connection with registration, and all regulatory samples which may be collected in connection with the enforcement of the act will be evaluated in waters prepared according to the following procedure:

(1) Two stock solutions are prepared. One, solution A, is made by dissolving 31.74 grams of MgCl₂ and 73.99 grams of CaCl₂ in boiled distilled water and adjusting to a one liter volume. The other, solution B, is made by dissolving 56.03 grams of NaHCO₃ in boiled distilled water and adjusting to a one liter volume. Solution A may be heat sterilized. Solution B cannot be heat sterilized, but can be sterilized by filtration. The required amount of solution A is added to a sterile one liter flask and at least 600 mls of sterile distilled water added. Then 4 mls of solution B is added and the volume brought to one liter with sterile distilled water. Each ml of solution A used will give the water a hardness equivalent to approximately 100 p.p.m. of hardness calculated as CaCO₃ using the formula:

$$\text{Total hardness as p.p.m. of CaCO}_3 = 2.95 \times \text{p.p.m. of Ca} + 4.115 \times \text{p.p.m. of Mg.}$$

In preparing waters in accordance with this procedure, the pH of all test waters up to 2,000 p.p.m. of hardness should fall between 7.6 and 8.0. Chemicals of reagent grade should be employed. If the hydrate of MgCl₂ is used, substitutions should be made on an equimolar basis. All synthetic hard waters prepared for use by this procedure should be checked chemically for hardness at the time the tests are made employing a procedure or procedures described in the 11th Edition Standard Methods for the Examination of Water and Sewage. A.P.H.A. (1960).

(d) In evaluating effectiveness claims for products to be used in waters of specified degrees of hardness according to the standard outlined in this section, the A.O.A.C. Germicidal and Detergent Sanitizers-Official test [Manual of Methods A.O.A.C. Ninth Edition, pages 70-72 (1960)] will be employed.

(e) Except as otherwise provided in this section, to be acceptable for registration, label claims relating to dairy, restaurant, and food plant utensil use must be based upon effective results, within 30 seconds, using the test named in paragraph (d) of this section in water of the degree of hardness indicated in the label claims. Supplemental claims for effectiveness at longer intervals of time or at elevated temperatures in dairy, restaurant, and food plant utensil use, or in other specified applications, will be given consideration, but should not be

made in a manner to confuse the basic recommendation by the manufacturer. Any labeling bearing claims relative to effectiveness in hard water in any type of application must bear an equally prominent declaration based on the procedure specified above.

(f) To avoid misleading the consumer, claims for effectiveness in waters above 100 p.p.m. of hardness should be made in increments no less than 50 p.p.m. of hardness calculated as CaCO₃. For example, evidence of effectiveness in waters of 478 p.p.m. of hardness should be construed as supporting a claim for effectiveness in waters of 450 p.p.m. of hardness, and evidence of effectiveness in waters of 510 p.p.m. should be construed as supporting a claim for effectiveness in waters up to 500 p.p.m. of hardness.

(g) Section 162.14 of the regulations defines misbranding to include "any statement directly or indirectly implying that the economic poison or device is recommended or endorsed by any agency of the Federal Government." Therefore, any label claims relating to endorsement or recommendation of a specific product by the Agency or the U.S. Public Health Service will not be accepted for registration. However, a claim such as "This product fulfills the criteria of Appendix F as revised March 12, 1956, of the Milk Ordinance and Code, 1953 Recommendations of the U.S. Public Health Service in waters up to ----- p.p.m. of hardness calculated as CaCO₃, when tested by the A.O.A.C. Germicidal and Detergent Sanitizers-Official Method" may be accepted.

§ 162.120 Interpretation with respect to registration of thallium products for the control of insect and rodent pests in the household.

(a) Labels and other labeling accepted in connection with registration of thallium-containing products for household use must bear clearly and prominently a statement to the effect that the product is for use only by governmental personnel trained in the proper use and management of such products. This includes qualified personnel in Federal, State, or local governments. An example of acceptable wording of such a limiting statement is as follows:

For use by Government agencies only.

In addition to the above statement, the label must also bear clearly and prominently a warning against sale to the general public and the labeling must otherwise comply with the current requirements of the Act and regulations.

(b) All applications for registration shall include five copies of all labels, circulars, or other literature which may be associated with or accompany the product at any time. A statement of the full formula shall be included giving each ingredient (including those in the bait) by percent.

§ 162.121 Interpretation with respect to liquid, powdered and pressurized household insecticides acceptable for depositing insecticidal and chemical residues.

(a) *Composition.* These products are ordinarily marketed as oil solutions, emulsions, suspensions, powers or pres-

surized products, some of which are designed for use in undiluted form by the consumer. In some cases concentrated products requiring various degrees of dilution are marketed. These products usually have a petroleum distillate base, together with such auxiliary solvents as may be necessary to keep the formulation as a solution under conditions of relatively low temperature. Water is sometimes used in the liquid formulations. Auxiliary solvents, such as methylated naphthalenes, methylated aromatic petroleum solvents, methylene chloride and methyl chloroform are frequently used, although the last two named are more common in pressurized products than in liquid formulations. The propellants commonly encountered are known as propellant 11 (trichloromonofluoromethane), propellant 12 (dichlorodifluoromethane), nitrogen, carbon dioxide, nitrous oxide, and certain hydrocarbons, such as propane. Propellant 12 is used alone or in various proportions

with propellant 11, methylene chloride or methyl chloroform, together with small amounts of propane. Pressurized products of this class usually contain lower levels of propellants than are commonly encountered in the products discussed in Interpretation 15, as revised (§ 162.113). The present interpretation is not intended to cover products designed primarily as space sprays which are used in such a manner as not to deposit substantial chemical residues on treated surfaces. Moreover, mothproofing treatments of woollens and fabrics for the purpose of impregnating them with a protective chemical residue are excluded from this Interpretation.

(b) *Acceptable ingredients.* The following is a list of chemicals frequently encountered in household type insecticides of this class. The percentage figure given in each case is the maximum that can be accepted for this purpose. An asterisk in connection with the percentage figure indicated that the usage is currently restricted to professional applications by a pest control operator or a public health official. All percentage figures are expressed in terms of weight alone.

Products covered by this interpretation frequently contain a combination of pesticidal ingredients together with synergized pyrethrins and thiocyanates. These ingredients may be used in the necessary combinations, except that when combinations of phosphates and/

ual treatment may be applied to as many areas of the infested premises and to as large a proportion of the available surface as may be considered necessary for effective pest control. When the usage is limited to "spot application" much greater attention should be given to limiting the treatment to those surfaces where the pests have been seen or where they are suspected of hiding. Such treatments would normally be limited to a maximum of 20 percent of the floor and lower wall surfaces including shelving and cabinets.

(e) *Basic insecticidal value.* These products are required to contain enough of the residual insecticidal ingredient so that when they are applied substantial residues of the insecticidal chemical will be deposited on all treated surfaces. The biological evaluation of the effectiveness of these treatments will be considered separately in all cases on the basis of the existing experimental information on the insecticidal value of the chemical or upon such data and practical evidence as can be furnished by the applicant. If new or unusual formulations or claims and directions for use are submitted, it will be necessary to request the submission of sufficient experimental evidence to justify the proposed claims. In any case, it will be necessary for the applicant to submit data to establish the safety of any new or unusual chemical or pesticidal treatment that is proposed. It is the usual practice to consult with the Public Health Service of the Department of Health, Education, and Welfare on such matters.

(f) *Directions for use—(1) General.* In all cases the labeling should bear adequate directions for use against all of the insects named in the labeling. These products are commonly recommended for the control of such pests as roaches (water bugs), house flies, mosquitoes, silverfish, spiders, bed bugs, ants, carpet beetles, scorpions, fleas, and brown dog ticks. Many of these formulations are not acceptable for mist spray application in the air and care should be taken to apply the products as relatively coarse wet sprays which will adhere to treated surfaces. This is especially important in the case of pressurized products. Since the habits and life cycles of different pests vary considerably, the directions must, in each case, be adapted to the particular kind of insect or other pest which is causing annoyance and to the type of structure or building in which the product is used. Claims that residual insecticidal value will last for any particular period of time are usually undesirable, due to the variable conditions under which the products are used. It may be stated that the product is a residual insecticide but the labeling should emphasize the need for repeated applications as often as necessary since it is not possible to anticipate all of the conditions of use, types of surfaces to be treated and cleaning operations of treated surfaces.

(2) *Particular insects—(1) Flies and mosquitoes.* Directions for use against these pests should provide for thorough

Pesticidal chemical and scope of treatment	Maximum allowable concentration (percent)	
	Liquid and pressurized	Powder
"Dufonate" O,O-dimethyl 2,2,2-trichloro-1-n-butylxyethyl phosphonate—%	2.0	-----
Dichloro diphenyl trichloroethane —% (DDT) (general treatment)	6.0	**10.0
Dichloro diphenyl dichloroethane —% (DDE) (general treatment)	6.0	10.0
Malathion—% (general treatment)	2.0	5.0
Malathion—% (spot application)	5.0	5.0
"Diazinon" O,O-diethyl O-(2-isopropyl-4-methyl-6-pyrimidinyl) phosphorothioate—% (spot application)	0.5	1.0
(Pest control operators only) (spot application)	*1.0	*5.0
"Perthane" diethyl diphenyl dichloroethane (or 1,2-dichloro-2,2-bis(4-ethylphenyl) ethane)—% (80% of the total amount of technical ingredient present). Related compounds—% (5% of the total amount of technical ingredient present) (spot application)	5.0	10.0
Ronnel—% (general treatment) (spot application)	2.0	5.0
Technical chlordane—% (spot application)	3.0	6.0
Dicuphon—% (spot application)	*1.0	-----
Dieldrin—% (spot application)	0.5	1.0
"Dilan" (A mixture of 2-nitro-1,1-bis (4-chlorophenyl) butane and 2-nitro-1,1-bis (4-chlorophenyl) propane)—% (general application)	3.0	-----
Heptachlor—% (spot application)	0.5	-----
(Lindane) gamma isomer of benzene hexachloride from lindane—% (spot application)	0.5	1.0
Pyrethrum powder (pyrethrins)—%	-----	1.0
Methoxychlor—% (general application)	6.0	10.0
Sodium fluoride—%	-----	95.0
Toxaphene—% (technical chlorinated camphene) (67-69% chlorine) (spot application)	6.0	10.0
Ryania—% (spot application)	-----	100.0
Silica aerogel (spot application)	-----	100.0
Silica gel—%	-----	100.0
<i>Repellent additives</i>		
"MGK R-11" 2,3,4,5-bis (2-butyl-ene) tetrahydrofurfural—% (spot application) (repellent)	5.0	-----
"MGK R-320" Di-n-propyl isocinchomerone—% (spot application)	2.0	-----
"Tabatrex" Dibutyl succinate—% (spot application) (repellent)	5.0	-----

** An additional specialized usage includes a concentration of 50% of DDT which is restricted to the control of roaches and ants by pest control operators or public health officials only. The dust should be placed only in areas inaccessible to children and pets. Any powder visible after application is completed should be carefully brushed into cracks and crevices or else removed. Such dusts may be applied on surfaces behind sinks, refrigerators, stoves and cabinets that are not accessible to animal pets and children. No general use in the household would be acceptable. Powders of this type may also be used as a rodenticide against mice.

† Malathion (O,O-dimethyl dithiophosphate of diethylmercaptosuccinate).

‡ Ronnel (O,O-dimethyl O-2,4,5 trichlorophenyl phosphorothioate).

§ Technical chlordane—% with explanatory substatement: Equivalent to —% (90% of first percentage) octachloro-4,7-methanotetrahydro indano and —% (40% of first percentage) related compounds.

¶ Dieldrin (O,O-dimethyl O-(2-chloro-4-nitrophenyl) phosphorothioate).

* An explanatory statement is required, reading: —% hexachloro-polyoctahydro-endo, exo-dimethanonaphthalene—% related compounds.

† 2-nitro-1,1-bis (p-chlorophenyl)propane —% 2-nitro-1,1-bis (p-chlorophenyl)butane —% (both active ingredients always present).

‡ Technical methoxychlor —% an explanatory substatement is required: Equivalent to —% (88% of the first percentage) 2,2-bis (p-methoxyphenyl) 1,1,1-trichloroethane and —% (12% of the first percentage) other isomers and reaction products.

or chlorinated hydrocarbons are proposed, concentrations of these ingredients should be proportionately reduced. The information set forth in paragraph (b) of Interpretation 15, as revised (§ 162.113(b)) is also applicable to the products covered by this interpretation.

(c) *Ingredient statement.* The information set forth in paragraph (c) of Interpretation 15, as revised (§ 162.113(c)) is equally applicable to the products covered by this interpretation.

(d) *Manner of application.* When general application is specified the resid-

treatment of all surfaces where these insects are known to alight or congregate. Emphasis should be placed on spraying or applying powders around doors, windows and porches. In all cases, repeated applications should be specified as often as necessary.

Acceptable chemicals: DDT, dichlorodiphenyl dichloroethane, "Butonate," heptachlor, malathion, "Diazinon," ronnel, chlordane, dicapthon, dieldrin, "Perthane," "Dilan," a mixture of 2-nitro-1,1-bis (4 chlorophenyl) butane and 2-nitro-1,1-bis (4 chlorophenyl) propane, lindane, methoxychlor, "MGK R-326" (repellent), "tabatrex" (repellent), and "MGK R-11" (repellent).

(ii) **Household ants, roaches and silverfish.** The directions for use against these pests should provide for thorough spraying or distribution of the powder into all parts of the room suspected of harboring them. Special attention should be paid to cracks and hidden surfaces around sinks or food storage areas where these insects may be hiding. Thorough treatment around doors and windows is desirable in connection with directions for use against ants. Spraying around baseboards, windows, door frames, bookcases and storage areas is usually desirable in connection with directions for use against silverfish. Repeated applications should be specified in all cases. Silica gels are usually applied at the rate of 2 ounces of the powder per 100 sq. ft. of treated floor area. Liberal applications are needed. Special care should be taken to use all of these products in such a manner that food and food utensils will not be contaminated. If any spray or powder should contaminate cooking utensils, silverware or dishes, they should be thoroughly cleaned.

Acceptable chemicals: DDT, dichlorodiphenyl dichloroethane, "Butonate" (roaches and silverfish only), malathion, sodium fluoride, pyrethrum powder, "Diazinon," ronnel, chlordane, dicapthon, dieldrin, heptachlor, methoxychlor, toxaphene, ryania, Silica gels, "Tabatrex" (repellent), and "MGK R-11" (repellent).

(iii) **Bed bugs.** The directions for use against this pest should provide for thorough spraying of the bed, the springs and the mattress, as well as the baseboards and wall cracks about the bedroom. Repeated applications are usually necessary for good results against this pest. In the case of malathion, the maximum acceptable concentration for this use is a 1 percent spray which in any case is to be applied lightly to the mattress. Chlordane, dicapthon and "Diazinon" are not acceptable for use against this pest. Lindane is not acceptable as a residual insecticide for treatment of beds and mattresses, even though a concentration of 0.1 percent has been accepted as a non-residual insecticide for use against this pest.

Acceptable chemicals: DDT, pyrethrum powder, dichlorodiphenyl dichloroethane, malathion and ronnel 1 percent.

(iv) **Carpet beetles.** The directions for use against these pests should provide

for thorough spraying of suitable formulations along baseboards, edges of carpeting, under furniture, under carpeting and rugs and in closets and shelving wherever these insects are seen or suspected. Pressurized products and powders may also be used for this purpose. In all cases, the treatment should be repeated as often as necessary.

Acceptable chemicals: DDT, dichlorodiphenyl dichloroethane, malathion, "Diazinon," chlordane, dieldrin, heptachlor, ronnel, lindane, methoxychlor and "Perthane."

(v) **Fleas and brown dog ticks in buildings.** Directions for use against these pests should provide for liberal applications to floor areas, cracks and crevices, sleeping quarters of animals, behind pictures and wherever presence of these insects may be suspected. Liberal and repeated applications to the infested areas are desirable in all cases. Spot applications are not suitable for the control of fleas. Consequently, such insecticides as lindane and chlordane are not acceptable for use against this pest.

Acceptable chemicals: DDT, dichlorodiphenyl dichloroethane, "Diazinon," ronnel, methoxychlor, malathion 2 percent and Silica gel (fleas only), and chlordane (for brown dog ticks).

(vi) **Spiders and scorpions.** Directions for the control of these pests should provide for thorough wet spraying or dusting around windows, doors and other areas over which these pests may crawl. Pressurized sprays may be used on the same general terms as liquid and powdered products. In all cases, the applications should be repeated as often as necessary.

Acceptable chemicals: DDT, dichlorodiphenyl dichloroethane, malathion, "Diazinon," ronnel (spiders only), chlordane, dieldrin, lindane, methoxychlor, heptachlor (spiders only), and "Butonate" (spiders only).

(vii) **Pantry pests.** Saw-toothed grain beetle, flour beetle, rice weevil, cigarette beetle, drug-store beetle and Indian-meal moth are pests included in this category. While cleanliness and good housekeeping are basic to the prevention of losses by reason of these pests, insecticides may sometimes be carefully used to advantage. Directions to aid in the control of these pests should provide for the removal of all packages of food and for the treatment of the interior surfaces of the shelves and cupboards with a residual spray. The spray must be allowed to dry before the packages are put back on the shelf. Shelf paper or foil should be used to prevent contact of food or utensils with sprayed surfaces. It should be emphasized that treatment of this kind is of only supplemental value since it does not affect the insects breeding inside the packages. Infested food packages should be destroyed or fumigated.

Acceptable chemicals: DDT, chlordane, lindane, methoxychlor, malathion, ronnel, "Perthane," and "Diazinon."

(g) **Caution and warning statements—**
(1) **General.** All economic poisons are required to bear warning or caution

statements which are necessary to protect the public from injury and acceptable directions for use must be consistent with these requirements. These cautions and directions are quite variable, depending on the composition of the product and the manner of use which is intended. The detailed precautions especially for operator protection, during use of most of the pesticidal ingredients, are given in Interpretation 18 (§ 162.116). Cautions to protect food and food handling utensils from contamination are often specified and are appropriate in any case. These products should be kept out of the reach of children and pets. Many of these products will stain or discolor wallpaper, textiles, and other finished surfaces or articles. Appropriate label cautions or warnings should be included in all such cases.

(2) **Liquid and powdered insecticides.** In all cases where petroleum distillate or other combustible formulations are involved, warnings against use in the presence of open flame and sparks are required.

(3) **Pressurized products.** Since many of these products contain significant amounts of petroleum distillate, or other combustible substances in the presence of open flames or heated surfaces and since bursting or leakage of contents may occur at high temperatures, all pressurized products (except as specified hereafter) should bear the following warning or its practical equivalent:

WARNING: Contents under pressure. Do not puncture. Do not use or store near heat or open flame. Exposure to temperatures above 130° F. may cause bursting. Never throw container into fire or incinerator.

Pressurized products which have extreme flammability or explosive hazards will be considered separately and additional precautionary labeling prescribed. Methods for determining the need for such additional precautionary labeling may be obtained from the Director, Pesticides Regulation Division, Environmental Protection Agency, Washington, D.C. 20250. It is the responsibility of the registrant to provide precautionary labeling which will be adequate to prevent injury to persons using or handling his product.

(h) **Deterioration.** Some of these formulations deteriorate quite rapidly in storage. Also, certain types of packaging tend to accelerate this deterioration. It is the responsibility of the registrant and marketer of the particular pesticide to so formulate, package and market his products that they will always contain the amounts of active ingredients which were represented in the information furnished at the time of registration. If products are known to deteriorate, a date may be placed on the label advising against use after a stipulated period of time. Products which have deteriorated are adulterated and should be withdrawn from the market.

(i) **Unwarranted claims.** These products are not effective against all household insects and claims for effectiveness against insects generally or all insects are unwarranted and should not be made.

While these products may have considerable residual insecticidal value when properly applied, it is usually desirable to avoid any specific claim that residual protection will last for any particular length of time. The conditions of use and types of surfaces that may be treated are so diversified that directions for repeated applications as necessary are desirable in all cases. Claims for exterminations are not warranted and should not be made. Products of this type are frequently injurious under some conditions to both man and animal and may contaminate food when improperly used. Therefore, their labels must ordinarily not include any unqualified claim such as "Non-toxic," "Non-poisonous," "Non-injurious" or "Harmless to man and animals." Such products are of no value in disinfecting and will not prevent disease and claims to that effect should not be made.

(j) *Registration.* All applications for registration should include duplicate copies of all labels, circulars or other literature which may be associated with or accompany the product at any time. Complete information concerning the composition of the product should also be furnished with the application. If the product does not conform to a conventional pattern of pesticidal usage against household pests, data should be furnished to demonstrate the practical value of the product for the various pests named in the labeling. Consultation with applicants is solicited at all times in order to eliminate possible misunderstanding.

(k) *Other interpretations.* This interpretation supplements interpretations 7, 15, and 18 as revised (7 CFR 162.105, 162.106, and 162.116).

§ 162.122 Interpretation with respect to claim for safety and nontoxicity on labeling of economic poisons.

(a) *Requirements of the act and regulations.* The act provides that an economic poison or device is misbranded if its labeling bears any statement, design, or graphic representation relative thereto or to its ingredients which is false or misleading in any particular (7 U.S.C. (z)(1)). Section 162.14(a)(5) prohibits the use of unwarranted claims as to the safety of the economic poison or its ingredients, including statements such as "safe," "non-poisonous," "non-injurious," or "harmless" with or without such a qualifying phrase as "when used as directed." This section does provide for limited claims for non-toxicity on those products which are determined by the Director to be non-toxic to humans and pets.

(b) *Economic poisons not permitted to have any claims for non-toxicity.* (1) No claim for non-toxicity to man or animals shall be made for any economic poison that is required to have any precautionary labeling relative to the toxicity of the product. (2) No new economic poison will be permitted to bear claims of non-toxicity until convincing evidence based on practical experience has shown that such claims are warranted.

(c) *Economic poisons permitted to bear limited claims for non-toxicity.* An economic poison may have such labeling claims as "non-toxic to humans and pets" when: (1) Use of such claims is not precluded by paragraph (b) of this section, and (2) such claims are supported by (i) adequate toxicity data on the specific product including active and inert ingredients to show that no warning or caution statements are necessary, (ii) subacute and chronic toxicity data on test animals sufficient to demonstrate that an adequate margin of safety exists between the dosages causing detectable effects and those recommended for effective use (up to 100 fold margin of safety may be required), and (iii) human and/or animal experience data demonstrating that humans and/or animals are not likely to be injured by the chemical under any reasonably foreseeable conditions.

Products meeting these requirements may be exempted from the provisions of § 162.9(a) with respect to the statement "Keep Out of Reach of Children."

(d) *Prominence of claims for non-toxicity.* Claims for non-toxicity permitted by paragraph (c) of this section may appear anywhere in the labeling provided they do not appear in such a manner as to be misleading to the public. They must be printed in type of a size and style bearing a reasonable relationship to other print on that part of the label on which they appear and comply with the following maximum type sizes.

Size of label panel	Maximum type size permitted
Less than 60 square inches.....	12 point.
60 square inches and above.....	18 point.

Repetition of claims for non-toxicity permitted by paragraph (c) of this section shall be held to a minimum and will not be permitted when, in the opinion of the Director, such repetition is likely to encourage misuse of the product, or tend to crowd or obscure other information required by the act and regulations to appear on the labeling.

§ 162.123 Interpretation with respect to labeling of sodium arsenite or arsenic trioxide products.

(a) *Home use unacceptable.* Labeling for economic poisons submitted in connection with registration under the Act bearing directions for use of products containing more than 2 percent sodium arsenite or more than 1.5 percent arsenic trioxide in or around the home is not acceptable.

(b) *Required warning against home use.* In addition to other warning and caution statements required by the regulations and interpretations under the Act, labels for such products with acceptable directions for agricultural, commercial, or industrial use must bear, in a prominent position, the warning statement(s) as indicated below:

- (1) All products; "Do Not Use or Store in or Around the Home."
- (2) Products intended for area treatments such as herbicide use; "Do Not

Allow Domestic Animals to Graze Treated Areas."

§ 162.124 Interpretation with respect to labeling of phosphorus paste products.

(a) *Home use unacceptable.* Labeling for economic poisons submitted in connection with registration under the Act bearing directions for use of products containing phosphorus paste in or around the home is not acceptable.

(b) *Acceptable directions for use by Government agencies or professional pest control operators.* Products bearing acceptable directions for commercial or industrial use and marketed in channels of trade which are limited to Government agencies or pest control operators will continue to be registered. In addition to other warning and caution statements required by the Act and regulations, labels for such products must bear the following statement in a prominent position: "Do not use or store in or around the home."

§ 162.125 Interpretation with respect to the term "germ proof" and related terms used in labeling of economic poisons.

For the purposes of the Act, the following terms shall have the meanings stated below:

(a) The terms "germ proof" and "germ proofed", referring to any surfaces, materials or articles, indicate the existence of actively germicidal or self disinfecting properties.

(b) The terms "germ proofs" and "germ proofers" mean that, when applied as directed, the economic poison will provide a germicidal or disinfecting result, and also provide treated surfaces, articles or materials with germ proof or germ proofed properties.

(c) The term "germ proofing" means a process that will, when followed, disinfect and provide germ proof and germ proofed surfaces, materials and articles.

PART 163—CERTIFICATION OF USEFULNESS OF PESTICIDE CHEMICALS

Sec.	
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AUTHORITY: The provisions of this Part 163 issued under sec. 3, 68 Stat. 511; 21 U.S.C. 346a.

§ 163.1 Words in the singular form.

Words in this part in the singular form shall be deemed to import the plural, and vice versa, as the case may demand.

§ 163.2 Definitions.

Unless the context otherwise requires, the following terms shall be construed, respectively, to mean:

(a) "Act" means the Federal Food, Drug, and Cosmetic Act (21 U. S. C. 301 et seq.), as amended by Public Law 518, 83d Congress, 2d Session, "An Act to amend the Federal Food, Drug, and Cosmetic Act with respect to residues of pesticide chemicals in or on raw agricultural commodities" (68 Stat. 511).

(b) "Director" means the Director of the Pesticides Regulation Division, Environmental Protection Agency, Washington, D.C.

(c) "Agency" means the Environmental Protection Agency.

(d) "Pesticide chemical" and "raw agricultural commodity" shall have the same meanings as they have in paragraphs (q) and (r), respectively, of section 201 of the act.

(e) "Economic poison" shall have the same meaning as it has under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U. S. C. 135-135k) and the regulations issued thereunder (Part 162 of this chapter).

(f) "Person" means individuals, partnerships, corporations, and associations.

(g) "Certification" means a certification by the Director that a pesticide chemical is useful for the purpose for which a tolerance or exemption is sought under the act.

(h) "Petition" means a petition filed with the Administrator, Environmental Protection Agency pursuant to section 408(d) (1) of the act.

§ 163.3 Administration.

The Director is authorized to take such action as, in his discretion, may be necessary to carry out the provisions of sections 408 (f) and 408 (l) of the act and the regulations in this part.

§ 163.4 Filing of requests for certification.

All requests for a certification shall be made in writing to the Director. Action upon such a request will not be undertaken unless (a) the person making the request has, pursuant to the provisions of the Federal Insecticide, Fungicide, and Rodenticide Act, registered or submitted an application for the registration of an economic poison consisting of or containing the pesticide chemical for which the certification is sought and (b) the request is accompanied by a copy of the petition. The person requesting certification may at any time withdraw such request for certification.

§ 163.5 Material in support of the request for certification.

In addition to the data required by section 408 (d) (1) of the act to be included in the petition, the request for certification should be supported by the following material, to the extent it is relied upon by the petitioner:

(a) A complete report of the results of any experimental work by the petitioner on the effectiveness of the pesticide chemical for the purposes intended;

(b) Data relating to the usefulness of the pesticide chemical obtained by other qualified investigators;

(c) Any other material which the petitioner believes will justify a finding of usefulness.

If such material is fully shown in the petition, it need not be set forth separately in the request for certification.

§ 163.6 Certification limited to economic poison uses.

If the product for which a certification is sought is intended for both economic poison and noneconomic poison uses, any certification relative to the usefulness of such product will refer only to economic poison uses. No action will be taken with respect to the noneconomic poison uses of such product.

§ 163.7 Factors considered in determining usefulness.

In determining whether a pesticide chemical is useful for the purposes for which a tolerance or exemption is sought, consideration will be given, among other things, to:

(a) The results of any experimental work by the petitioner on the effectiveness of the pesticide chemical for the purposes intended.

(b) Data relating to the usefulness of the pesticide chemical obtained by other qualified investigators.

(c) Reports of other experimental work before the Director in publications, the official files of the Agency, or otherwise.

(d) Opinions of experts qualified in the fields involved.

§ 163.8 Basis for determination of usefulness.

Usefulness of a pesticide chemical for the purposes intended will be determined upon the basis of its practical, pesticidal, or biological, effectiveness. Pesticidal effectiveness may be established in terms of percentage reduction or control of pests or, when appropriate, increase in yield or quality of crop following application of the specified pesticide under the conditions prescribed, compared with the results from adequate controls. Consideration may also be given to other economic gain or practical benefit, including: Economy or ease of production, harvest, or storage of crop; flexibility as regards the time of planting or harvest, even at the possible sacrifice of yield; and general benefit to livestock, plants, or human welfare.

§ 163.9 Proposed certification; notice; request for hearing.

(a) If, upon the basis of the data before him, it appears to the Director that the pesticide chemical is not useful for the purpose or purposes for which a tolerance or exemption is sought, or is useful for only some of the purposes for which a tolerance or exemption is sought, the Director shall notify the person requesting the certification of his proposal to so certify. Notice of such proposed certification will be given by registered mail.

(b) Within one week after receipt of such notice of proposed certification the person requesting the certification may, by filing a request with the Director, (1) request that the certification be made on the basis of the proposed certification; (2) request a hearing on the proposed certification or the parts objected to; (3) request both such certification and such hearing; or (4) withdraw the request for certification as provided for in § 163.10. If no such request or withdrawal is filed with the Director within such time, the certification will be made as proposed.

§ 163.10 Withdrawal of request for certification pending clarification or completion.

In some cases it may be necessary for the Director to notify the petitioner of his proposal to certify that the pesticide chemical does not appear to be useful for some or all of the purposes for which a tolerance or exemption is sought only because the data submitted by the petitioner are not sufficiently clear or complete to justify a finding of usefulness. In such cases the petitioner may withdraw his request for certification pending its clarification or the obtaining of additional data, and no further action will be taken with respect to the making of the certification until the request for certification is resubmitted. Upon the resubmission of the request for certification, the time limitation within which final certification is required to be made will begin to run anew from the date of the resubmission.

§ 163.11 Registration under the Federal Insecticide, Fungicide, and Rodenticide Act.

(a) Since in most cases where a pesticide chemical may leave a residue in or on a raw agricultural commodity there can be no determination of the adequacy of the directions for use or the warning or caution statements appearing on the labeling of an economic poison until a tolerance or exemption has been established for the pesticide chemical which is, or is a part of, such economic poison, it will not ordinarily be possible to register the economic poison under the Federal Insecticide, Fungicide, and Rodenticide Act until such tolerance or exemption has been established.

(b) Factors other than pesticidal, or biological, effectiveness are considered in the granting of registration under the Federal Insecticide, Fungicide, and Rodenticide Act. Therefore, the criteria for registration are not all applied in considering the certification of usefulness, and the fact that such a certification has been made does not mean that the economic poison can be registered for the uses concerned.

§ 163.12 Opinion as to residue.

(a) In forming an opinion whether the tolerance or exemption proposed by the petitioner reasonably reflects the amount of residue likely to result when the pesticide chemical is used in the manner

proposed, consideration will be given, among other things, to:

(1) Data furnished by the petitioner showing (i) the results of tests to ascertain the amount of residue remaining, including a description of the analytical methods used, and (ii) practicable methods for removing residue which exceeds any proposed tolerance;

(2) Reports of other experimental work before the Director in publications, the official files of the Agency, or otherwise;

(3) Opinions of experts qualified in the fields involved.

(b) If a tolerance proposed by the petitioner is reasonably to reflect the amount of residue likely to result when a pesticide chemical is used, it must be large enough to include all residue which is likely to result when the pesticide chemical is used in the manner proposed by the petitioner, but not larger than needed for this purpose. The tolerance proposed by the petitioner may take into account reduction of residue by washing, brushing, or other applicable method.

(c) If there is insufficient information before the Director to support an opinion as to whether the tolerance proposed by the petitioner reasonably reflects the amount of residue likely to result, the opinion will so state.

PART 164—RULES GOVERNING THE APPOINTMENT, COMPENSATION, AND PROCEEDINGS OF AN ADVISORY COMMITTEE; AND RULES OF PRACTICE GOVERNING HEARINGS UNDER THE FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT

Subpart A—General

- Sec. 164.1 Meaning of words.
- 164.2 Definitions.
- 164.3 Scope and applicability of this part.
- Sec. 164.4 Submission of a determination respecting an economic poison to an advisory committee, and institution of a hearing regarding the application for registration or cancellation or suspension of an economic poison under the Act.

Subpart B—Rules Governing the Appointment, Compensation, and Proceedings of an Advisory Committee

- 164.10 Appointment of advisory committee.
- 164.11 Procedure for advisory committee.

Subpart C—Rules of Practice Governing Hearings

- 164.20 Institution of hearing; docket number.
- 164.21 Contents of document setting forth objections.
- 164.22 Filing copies of notification respecting registration.
- 164.23 Answer to objections.
- 164.24 Motions and requests.
- 164.25 Prehearing conference.
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- 164.28 Order of proceeding and burden of proof.
- 164.29 Evidence.
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- 164.31 Proposed findings of fact, conclusions, and order.

- Sec. 164.32 Examiner's report.
- 164.33 Exceptions; objections; request for oral argument.
- 164.34 Final order.
- 164.35 Argument before the Administrator.
- 164.36 Ex parte discussion of proceeding.
- 164.37 Application for reopening hearings; for rehearing; or reargument of proceeding, or for reconsideration of order.
- 164.38 Procedure for disposition of petitions.
- 164.39 Filing; number of copies.
- 164.40 Service; proof of service.
- 164.41 Computation of time.
- 164.42 Extensions of time.

AUTHORITY: The provisions of this Part 164 issued under secs. 4, 5, 61 Stat. 167-168, as amended; 7 U.S.C. 135b, 135d.

Subpart A—General

§ 164.1 Meaning of words.

As used in this part, words in the singular form shall be deemed to import the plural, and vice-versa, as the case may require.

§ 164.2 Definitions.

For the purposes of this part, the following terms shall be construed, respectively, to mean:

(a) The term "Act" means the Federal Insecticide, Fungicide, and Rodenticide Act (61 Stat. 163, et seq. as amended, 7 U.S.C. 135-135k).

(b) The term "person" includes any individual, partnership, association, corporation, or any organized group of persons, whether incorporated or not.

(c) The term "Administrator" means the Administrator of the Environmental Protection Agency of the United States, or any officer or employee of the Environmental Protection Agency to whom authority has heretofore been delegated, or to whom authority may hereafter be delegated, to act in his stead, including the Judicial Officer of the Environmental Protection Agency.

(d) The term "Hearing Clerk" means the Hearing Clerk, Environmental Protection Agency, Washington, D.C. 20250.

(e) The term "Examiner" means an examiner in the Office of the Hearing Examiners, Environmental Protection Agency.

(f) The term "Examiner's Report" means the report made by the Examiner to the Administrator with respect to proposed:

(1) Findings of fact and conclusions regarding all material issues of fact, law or discretion, as well as the reasons or basis therefor, and

(2) Order.

(g) [Reserved]

(h) The term "Director" means the Director, Pesticides Regulation Division, Environmental Protection Agency, or any official or employee of the Environmental Protection Agency to whom authority has heretofore been delegated, or to whom authority may hereafter be delegated, to act in his stead.

(i) The term "Division" means the Pesticides Regulation Division, Environmental Protection Agency.

(j) The term "applicant" means any person who has made application to have

an economic poison¹ registered pursuant to the provisions of the Act.

(k) The term "registrant" means any person who has registered an economic poison¹ pursuant to the provisions of the Act.

(l) The term "petitioner" means any person who has been notified that his application for registration of an economic poison¹ has been refused or any person who has received a notice of cancellation or suspension of the registration of an economic poison¹ under the Act, and who has filed a petition requesting that the matter be referred to an advisory committee.

(m) The term "advisory committee" means a group of qualified experts designated to submit an independent report to the Administrator regarding the registration of an economic poison.¹

(n) The term "hearing" means any action arising under the Act, in which it is required by law that relevant and material evidence be received at a public hearing.

(o) The term "final order" includes the Administrator's findings, conclusions, order and rulings on motions, exceptions, statements of objections and proposed findings, conclusions and orders submitted by parties and not theretofore ruled upon.

§ 164.3 Scope and applicability of this part.

The provisions of Subpart B of this part shall be applicable to the appointment, compensation, and proceedings of an advisory committee; and the provisions of Subpart C of this part shall govern hearings conducted pursuant to the provisions of the Act.

§ 164.4 Submission of a determination respecting an economic poison to an advisory committee, and institution of a hearing regarding the application for registration or cancellation or suspension of an economic poison under the Act.

(a) *Applications for registration of an economic poison under the Act.* Whenever the Director shall determine, in connection with an application for registration of an economic poison under the Act, that it does not appear that the article is such as to warrant the proposed claims for it or if the article and its labeling and other material required to be submitted do not comply with the provisions of the Act, the Director shall notify the applicant of the manner in which the article, labeling, or other material required to be submitted fail to comply with the Act and the applicant shall have an opportunity to make the necessary corrections. If the applicant does not make the corrections, the Director will refuse to register the article: *Provided, however,* That an applicant may, within 30 days after service of notice of refusal to register and the reasons therefor:

¹ See definition of "economic poison" and related terms contained in section 2 of the Act (7 U.S.C. 135b) and § 162.2 of the regulations for the enforcement of the Act (7 CFR 162.2).

(1) File a petition with the Hearing Clerk requesting that the matter be referred to an advisory committee, or

(2) File objections with the Hearing Clerk to the determination of the Director and request a public hearing respecting the matter.

(b) *Cancellation of the registration of an economic poison under the Act.* The Director may cancel the registration of an economic poison whenever it does not appear that the article or its labeling or other material required to be submitted complies with the provisions of the Act. Whenever the Director determines that a registration of an economic poison should be canceled, he will notify the registrant of his action and state the reasons therefor. A cancellation of registration shall be effective 30 days after service of the cancellation notice on the registrant, unless within such time the registrant:

(1) Makes the necessary corrections;

(2) Files a petition with the Hearing Clerk requesting that the matter be referred to an advisory committee; or

(3) Files objections with the Hearing Clerk and requests a public hearing.

(c) *Suspension of the registration of an economic poison under the Act.* Whenever the Director finds that such action is necessary to prevent an imminent hazard to the public, he may, by order, suspend the registration of the economic poison immediately. In such event, the Director will give the registrant notice of the action and the registrant shall have the opportunity to have the matter submitted to an advisory committee and shall have the opportunity for an expedited hearing regarding the matter.

(d) *Procedure available if there is an adverse order after referral to an advisory committee.* If a matter regarding the registration of an economic poison has been referred to an advisory committee and thereafter the Administrator makes a determination and issues an order that is adverse to the applicant or registrant, the applicant or the registrant may, within 60 days from the date of the order of the Administrator, file objections thereto with the Hearing Clerk and request a public hearing regarding the matter.

(e) *Referral to an advisory committee at the request of the Administrator.* The Administrator may, on his own initiative and when in his opinion it is desirable to have an independent evaluation respecting the merits of the registration of any economic poison, refer the matter to an advisory committee. In such event, the Administrator shall give the applicant or the registrant notice of the submission of the matter to the advisory committee.

Subpart B—Rules Governing the Appointment, Compensation, and Proceedings of an Advisory Committee

§ 164.10 Appointment of advisory committee.

(a) *Qualifications of experts.* Whenever a petition for an advisory committee is filed or the Administrator otherwise

deems such referral desirable, the Administrator shall request the National Academy of Sciences, National Research Council, to select qualified experts, including at least one representative from a land-grant college, willing to serve on the advisory committee. All such experts shall have had sufficient training and experience in toxicology, pharmacology, bacteriology, chemistry, entomology, plant pathology and physiology, human pathology and physiology, or other appropriate science to evaluate the safety or efficacy of economic poisons. The Administrator will request the National Academy of Sciences, when it furnishes the names of such experts, to supply a biographical sketch showing the background of their experience and their connection, if any, with academic and commercial institutions.

(b) *Number of experts.* The Administrator shall designate the number and names of experts to serve on the advisory committee, and each such committee shall have at least one expert who is a representative from a land-grant college. The Administrator shall appoint one member of the committee as chairman, and the chairman shall be the spokesman of the committee for receiving and forwarding reports and other functions of the committee.

(c) *Compensation for experts.* The Administrator shall appoint the experts so selected and fix their compensation at not to exceed the maximum permitted by other authority per day for each day or part thereof spent in committee meetings, plus necessary traveling and subsistence expenses while the experts are serving away from their places of residence. Subsistence expenses shall not exceed the maximum per diem permitted by this Department.

§ 164.11 Procedure for advisory committee.

(a) *Submission of information to advisory committee.* The Administrator shall submit to the chairman of the committee the petition and such other relevant information as he may have available with respect to registration of the product. When the Administrator submits a matter to an advisory committee he shall inform the applicant or the registrant and shall furnish him with copies of the material that is furnished to the committee. The chairman shall acknowledge receipt of the information and readiness of the committee to act. A copy of this acknowledgment shall be forwarded to the applicant or registrant by the chairman of the committee.

(b) *Advisory committee meetings.* A secretariat to advisory committees will be established by the Administrator. The secretariat shall furnish members of the committee with copies of the petition and any data received by the chairman. If the chairman of the committee believes that a meeting of the committee is necessary before making a recommendation, he shall so advise the Administrator and the petitioner. Such meeting shall be held in Washington, D.C., or such other place as the Administrator may designate.

The Administrator shall furnish a suitable meeting place for the committee. If a meeting is held, the secretariat shall keep the minutes and provide clerical assistance.

(c) *Report of the advisory committee.* As soon as practicable, but not later than 60 days after the date on which the information referred to in paragraph (a) of this section has been submitted to the committee (unless the time has been extended as provided in paragraph (d) of this section), the chairman shall certify to the Administrator the report of the committee, including any minority report. The report shall include a recommendation as to the registration of the article and a statement of the reasons or basis for the recommendation, together with copies of all relevant data or material considered by the committee, except that in the case of scientific literature readily available in scientific libraries, proper reference may be made to it instead of furnishing actual copies. The report of the advisory committee shall be available for inspection by any interested person after the Administrator's order with respect to registration of the product is issued.

(d) *Extension of time for advisory committee report.* If at any time within the 60-day period referred to in paragraph (c) of this section the chairman believes that the advisory committee needs more time, he shall so inform the Administrator in writing, in which case the Administrator may extend said time not to exceed 60 additional days. Notification of any such extension of time will be sent to the applicant or registrant by the Administrator.

(e) *Assessment of costs of submission to an advisory committee.* (1) In the event that an applicant or a registrant requests that a matter concerning the registration of an economic poison be referred to an advisory committee, the costs of such referral shall be borne by the applicant or the registrant unless the committee shall recommend in favor of the applicant or the registrant.

(2) Costs of the advisory committee shall include compensation for experts as provided in § 164.10(c) and the expenses of the secretariat, including the costs of duplicating petitions and other related material referred to the committee.

(3) An advance deposit shall be made in the amount of \$2,500 to cover the costs. Further advance deposits of \$2,500 each shall be made upon request of the Administrator when necessary to prevent arrears in the payment of such costs. Any deposits in excess of actual expenses will be refunded to the depositor.

(4) All deposits and fees required by the regulations in this part shall be paid by money order, bank draft, or certified check drawn to the order of the Environmental Protection Agency, Washington, D.C. 20250, whereupon after making appropriate record thereof they will be transmitted to the Treasurer of the United States, for deposit to the proper account.

(5) The Administrator may waive or refund such fees in whole or in part when in his judgment such action will be warranted and equitable under the particular circumstances and promote the public interest.

(6) Any person who believes that payment of these fees will work a hardship on him may petition the Administrator to waive or refund the fees.

(f) *Consultation with advisory committee.* The applicant or registrant and representatives of the Environmental Protection Agency shall have the right to consult with the advisory committee. Such persons shall notify the chairman of a desire to consult with the committee and, if practicable, make appointments through him. The report of the advisory committee shall show the names of all persons, other than committee members, discussing the petition or referral with the committee or a committee member.

(g) *Confidentiality of data.* All data submitted to an advisory committee shall be considered confidential by such committee: *Provided*, That this provision shall not be construed as prohibiting the use of such data by the Committee in connection with its consultation with the applicant or registrant or representatives of the Environmental Protection Agency, and in connection with its report and recommendations to the Administrator.

(h) *Order of the Administrator.* The date of receipt of the advisory committee report and recommendations shall be the date for computing the time for the Administrator to act with respect to registration of the economic poison. Within 90 days of such date, the Administrator shall make his determination and issue an order, with findings of fact, with respect to the registration of the economic poison. The Administrator shall serve a copy of his order on the applicant or the registrant.

(i) *National Academy of Sciences to designate committee member to testify.* The National Academy of Sciences shall designate one of the committee members who will be available to appear and testify at the request of the Administrator, the applicant or registrant, or the Examiner, at a public hearing, if one occurs, with respect to the report and recommendations of the committee, and the Academy shall notify the Administrator of the name of such member: *Provided, however*, That this shall not preclude any other member of the committee from being requested to appear and testify at such hearing.

Subpart C—Rules of Practice Governing Hearings

§ 164.20 Institution of hearing; docket number.

Whenever a document setting forth objections and requesting a public hearing is filed with the Hearing Clerk, the matter shall be docketed and assigned an "I. F. & R." docket number by the Hearing Clerk and thereafter the proceeding shall be referred to by such number.

§ 164.21 Contents of document setting forth objections.

(a) *Concise statement of matters alleged to be unwarranted required.* Any document filed pursuant to § 164.4 containing objections to the refusal of an application for registration of an economic poison or cancellation or suspension of the registration of such a product, shall clearly and concisely set forth such objections and the basis for each objection, including relevant allegations of fact concerning the economic poison under consideration.

(b) *Amendments to objections.* At any time prior to the close of the public hearing, the objections may be amended; but, in the case of an amendment adding new assertions or matters, the hearing shall, on request of the Division, be adjourned for a period not exceeding 15 days.

§ 164.22 Filing copies of notification respecting registration.

After a copy of the document setting forth the objections and requesting a public hearing is served upon the Administrator, the Administrator shall file with the Hearing Clerk a copy of the notice of refusal to register the economic poison involved, or the notice of cancellation or suspension of the registration of such economic poison, which was transmitted to the applicant or the registrant. Such notice shall become a part of the record of the proceeding.

§ 164.23 Answer to objections.

(a) *Filing and Service.* Within 20 days after a copy of the document setting forth the objections and requesting a public hearing is served upon the Administrator, he shall file an answer to the objections.

(b) *Contents of the answer.* The answer shall (1) contain a concise statement of the facts relied upon respecting the notice of refusal to register, or the cancellation or suspension of the registration of an economic poison; and (2) set forth the names of the scientific experts and scientific literature and data considered or consulted when making the determination, and (3) other appropriate reply to any matter raised by the objections.

§ 164.24 Motions and requests.

(a) *General.* All motions and requests shall be in writing and shall be filed with the Hearing Clerk, unless made during the course of a public hearing, in which case they may be stated orally and made a part of the transcript. The Examiner is authorized to rule upon all motions and requests filed or made prior to the filing of his report with the Hearing Clerk as hereinafter provided in § 164.32. The Administrator will rule upon all motions and requests filed after that time.

(b) *Motions.* All motions and requests concerning the sufficiency of the objections must be made within the time allowed for filing an answer. All motions and requests shall state the particular order, ruling or action desired and the grounds therefor.

(c) *Answers to motions and requests.* Within 15 days after service of any written motion or request, or within any longer period fixed by the Administrator or the Examiner, the opposing party shall file an answer to the motion or request or shall be deemed to have no objection to the granting of the relief asked for in the motion or request. Unless specifically permitted by the Administrator or the Examiner, the movant shall have no right to reply to the answer.

(d) *Certification of interlocutory issues to the Secretary.* The submission or certification of any motion, request, or other question to the Administrator prior to the time the Examiner's report is filed with the Hearing Clerk, shall be in the discretion of the Examiner. The Examiner may either rule upon the motion, request, or other question, or certify the matter to the Administrator, but not both. If the Examiner rules on the matter, the propriety of such ruling shall be reviewed by the Administrator only during his consideration in connection with the issuance of a final order.

§ 164.25 Prehearing conference.

In any proceeding in which it appears that a prehearing conference will expedite the hearing, the Examiner, at any time prior to the commencement of the hearing, may order such conference and request the parties or their counsel to consider (1) the simplification of issues; (2) the necessity or desirability of amendments to the pleadings; (3) the possibility of obtaining stipulations of fact and of documents which will avoid unnecessary proof; (4) the limitation of the number of experts and other witnesses; and (5) any other matter that may expedite the hearing or aid in the disposition of the matter. No transcript of such prehearing conference shall be made unless a request therefor by one of the parties is granted by the Examiner in view of the nature of the matters to be considered at the conference and the purposes of the conference; however, in the absence of a transcript, the Examiner shall prepare and file for the record a written summary of the action taken at such conference, which shall incorporate any written stipulations or agreements made by the parties at or as a result of the conference. If circumstances render a prehearing conference impracticable, the Examiner may request the parties to correspond with him for the purpose of accomplishing any of the objectives set forth in this section. The Examiner shall forward copies of letters and documents sent to him in this connection to the parties as the circumstances require. Correspondence in such negotiations shall not be a part of the record, but the Examiner shall submit a written summary for the record if any action is taken.

§ 164.26 Examiners.

(a) *Assignment.* No Examiner shall be assigned to serve in any hearing under the Act who:

(1) Has any pecuniary interest in any matter or business involved in the proceeding;

(2) Is related within the third degree, by blood or marriage, to any party to the proceeding; or

(3) Has participated in the investigation preceding the institution of the hearing or in the determination of the Administrator respecting the registration of the economic poison or in the preparation of the notice regarding such determination.

(b) *Disqualification of the Examiner.*

(1) Any party may, by motion made to the Examiner, request that the Examiner disqualify himself and withdraw from the proceeding. The Examiner may then either rule upon or certify the motion to the Administrator, but not both.

(2) An Examiner shall withdraw from any proceeding in which he deems himself disqualified for any reason.

(c) *Conduct.* The Examiner shall conduct the proceeding in a fair and impartial manner, and shall not consult with any person or party on any fact in issue unless upon notice and opportunity for all parties to participate.

(d) *Powers.* Subject to review by the Administrator, as provided elsewhere in this part, the Examiner shall have power to:

(1) Rule upon motions and requests;

(2) Set the time and place of hearing, adjourn the hearing from time to time, and change the time and place of hearing;

(3) Administer oaths and affirmations and take affidavits;

(4) Examine witnesses;

(5) Rule on objections and admit evidence relevant and material to the issues and exclude other evidence;

(6) Hear oral argument on the facts or on the law; and

(7) Do all acts and take all measures necessary for the maintenance of order at the hearing and for the efficient, fair and impartial conduct of the proceeding.

(e) *Who may act in the absence of the Examiner.* In case of the absence of the Examiner or his inability to act, the powers and duties to be performed by him under this part in connection with a hearing assigned to him may, without abatement of the proceeding unless otherwise directed by the Administrator, be assigned to another Examiner.

§ 164.27 Procedure for a public hearing.

(a) *Time and place of hearing.* After a proceeding has been instituted in accordance with the procedures set forth in this part, the Examiner, giving careful consideration to the convenience of the parties, shall set a time and place for hearing and shall file with the Hearing Clerk a notice stating the time and place of hearing which shall be served upon the parties. If any change in the time or place of hearing is made, the Examiner shall file with the Hearing Clerk a notice of such change, which notice shall be served upon the parties unless the change is made during the course of the public hearing and is made a part of the transcript.

(b) *Appearances—(1) Representatives.* Parties may appear in person or

by counsel or other representative. Persons who appear as counsel or in a representative capacity must conform to the standards of ethical conduct required of practitioners before the courts of the United States. Whenever the Administrator finds, after notice and opportunity for hearing, that a person, who is acting or has acted as counsel or representative for another person in any proceeding before the Administrator, is unfit to act as such counsel or representative, he will order that such person be precluded from acting as counsel or representative in any proceeding under the Act. The procedure in such case will be governed by the applicable provision of this part.

(2) *Failure to appear.* If any party to the proceeding after being duly notified, fails to appear at the hearing, he shall be deemed to have waived the right to participate in the public hearing in the proceeding. In the event that a party appears at the hearing and no party appears for the opposing side, the party who is present shall have an election whether to present his evidence, in whole or in part, in the form of affidavits or by oral testimony before the Examiner. Failure to appear at a hearing shall not be deemed to be a waiver of the right to be served with the copy of the Examiner's report and to file exceptions and make oral argument before the Administrator with respect thereto, in the manner provided in §§ 164.33 and 164.35.

§ 164.28 Order of proceeding and burden of proof.

At the hearing, the person whose objections raised the issues to be determined shall be, within the meaning of 5 U.S.C. 556(d) (formerly 5 U.S.C. 1006(c)), the proponent of the order sought, and accordingly shall proceed first at the hearing and have the burden of proof.

§ 164.29 Evidence.

(a) *General.* The testimony of witnesses at the hearing shall be upon oath or affirmation and subject to cross-examination. Any witness may, in the discretion of the Examiner, be examined separately and apart from all other witnesses except those who may be parties to the proceeding. The examiner shall admit all relevant and material evidence, except evidence which is unduly repetitious.

(b) *Report of an advisory committee.* If a matter concerning the registration of an economic poison had been submitted to an advisory committee, all reports, recommendations, and underlying data, and reasons certified to the Administrator by the advisory committee shall be made a part of the record of the hearing, if relevant and material, subject to the provisions of 5 U.S.C. § 556(d).

(c) *Testimony of member of advisory committee.* If a matter concerning the registration of an economic poison had been submitted to an advisory committee, the testimony of the member of the advisory committee designated by the National Academy of Sciences to appear and testify at the hearing with respect to

the report and recommendations of such committee, shall, if relevant and material, be received on request of the Administrator, the applicant or registrant, or the Examiner: *Provided, however,* That this shall not preclude any other member of the advisory committee from appearing and testifying at the hearing pursuant to such a request.

(d) *Objections.* If a party objects to the admission or rejection of any evidence or the limitation of the scope of any examination or cross-examination, he shall state briefly the grounds for such objection, whereupon an automatic exception will follow if the objection is overruled by the Examiner. The transcript shall not include argument or debate thereon, except as ordered by the Examiner. The ruling of the Examiner on any objection shall be a part of the transcript. Only objections made before the Examiner may be subsequently relied upon in the proceeding.

(e) *Records of the Department.* A true copy of every written entry in the records of the Environmental Protection Agency, made by an officer or employee thereof in the course of his official duty and relevant and material to the issues involved in the hearing, shall be admissible as prima facie evidence of the facts stated therein, without the production of such officer or employee.

(f) *Exhibits.* Except where the Examiner finds that the furnishing of copies is impracticable, copies of each exhibit, in addition to the original, shall be filed with the Examiner or the use of the other parties to the proceeding. A true copy of an exhibit may, in the discretion of the Examiner, be substituted for the original.

(g) *Official notice.* Official notice may be taken of the official publications of the Environmental Protection Agency and other Federal agencies, of such matters as are judicially noticed in the courts of the United States, and of any other matter of technical or scientific fact of established character: *Provided, however,* That the parties shall be given adequate opportunity to show that such facts are erroneously noticed.

(h) *Offer of proof.* Whenever evidence is excluded from the record, the party offering such evidence may make an offer of proof, which shall be included in the transcript. The offer of proof for excluded oral testimony shall consist of a brief statement describing the nature of the evidence excluded. If the evidence consists of an exhibit, it shall be inserted in the record in toto. In the event the Administrator decides that the Examiner's ruling in excluding the evidence was erroneous and prejudicial, the hearing shall be reopened to permit the taking of such evidence.

§ 164.30 Transcripts.

(a) *Filing and certification.* Oral hearings shall be stenographically reported and transcribed. As soon as practicable after the close of the hearing, the examiner shall certify that the original transcript is a true transcript of the testimony offered or received at the hearing.

except in such particulars as he shall specify, and that the exhibits accompanying the transcript are all the exhibits introduced at the hearing, with such exceptions as he shall specify. A copy of such certificate shall be attached to each of the copies of the transcript.

(b) *Ordering copies.* Parties to the proceeding or other persons who desire a copy of the transcript of the hearing may place orders with the reporter who will furnish and deliver such copies directly to the purchaser upon payment therefor at the rate per page provided by the contract between the reporter and purchaser.

§ 164.31 Proposed findings of fact, conclusions, and order.

Within 20 days of the close of the hearing, each party may file with the Hearing Clerk proposed findings of fact, conclusions, and orders, based solely on the record, and a brief in support thereof. A copy of each such document filed by a party shall be served upon the other party or parties by the Hearing Clerk.

§ 164.32 Examiner's report.

The Examiner, within 20 days after the termination of the period allowed to the parties for the filing of proposed findings of fact, conclusions, and orders, and briefs in support thereof, shall prepare on the basis of the record and shall file with the Hearing Clerk, his report, a copy of which shall be served upon each of the parties.

§ 164.33 Exceptions; objections; request for oral argument.

(a) Within 5 days after service of the Examiner's Report, each party may take exception to any matter set forth in such report, and in such case shall file exceptions in writing with the Hearing Clerk, referring to the relevant pages of the transcript, and suggesting corrected findings of fact, conclusions, or order. Within the same period of time, each party may file with the Hearing Clerk a brief statement in writing concerning each of the objections taken to the action of the Examiner at the hearing, as set out in § 164.29, upon which the party wishes to rely, referring where relevant, to the pages of the transcript. A party may file a brief in support of any exceptions or objections which he may file.

(b) A party, if he files exceptions or a statement of objections, shall state in writing whether he desires to make an oral argument thereon before the Administrator; otherwise he shall be deemed to have waived such oral argument.

§ 164.34 Final order.

As soon as practicable after the expiration of the period for filing exceptions, and briefs, or, in case oral argument is had, as soon as practicable thereafter, but not later than 90 days after the completion of the hearing, the Administrator shall issue his final decision and order, including his rulings on any exceptions or objections filed by the parties.

§ 164.35 Argument before the Secretary.

Except where the Administrator determines that argument on additional issues would be helpful, argument whether oral or on brief, shall be limited to the issues raised by the exceptions and statement of objections to action of the Examiner. If the Administrator determines that additional issues should be argued, counsel for the parties shall be given reasonable notice of such determination, so as to permit preparation of adequate argument on all the issues to be argued.

§ 164.35 Ex parte discussion of proceeding.

At no stage of the hearing procedure between its institution and the issuance of the order shall the Administrator discuss ex parte the merits of the proceeding with any person who is connected with the proceeding in an advocative or in an investigative capacity, or with any representative of such person: *Provided, however,* That the Administrator may discuss the merits of the case with such person if all parties to the proceeding, or their representatives, have been given an opportunity to be present. Any memorandum or other communication addressed to the Administrator, during the pendency of the proceeding, and relating to the merits thereof, by or on behalf of any party, shall be regarded as argument made in the proceeding and shall be filed with the Hearing Clerk, who shall serve a copy thereof upon the opposite party to the proceeding, and opportunity will be given the opposite party to file a reply thereto.

§ 164.37 Application for reopening hearings; for rehearing; or reargument of proceeding, or for reconsideration of order.

(a) *Petition requisite—(1) Filing; service.* An application for reopening the hearing to take further evidence, or for rehearing or reargument of the proceeding, or for reconsideration of the order, must be made by petition to the Administrator filed with the Hearing Clerk, who shall serve a copy thereof upon the other party or parties to the proceeding. Every such petition must state specifically the grounds relied upon.

(2) *Petitions to reopen hearings.* A petition to reopen a hearing to take further evidence may be filed at any time prior to the issuance of the final order. Every such petition shall state briefly the nature and purpose of the evidence to be adduced, shall show that such evidence is not merely cumulative, and shall set forth a good reason why such evidence was not adduced at the hearing.

(3) *Petitions to rehear or reargue proceedings, or to reconsider orders.* A petition to rehear or reargue the proceeding or to reconsider the order shall be filed within 10 days after the date of service of the order. Every such petition must state specifically the matters claimed to have been erroneously decided and alleged errors must be briefly stated.

§ 164.38 Procedure for disposition of petitions.

Within 7 days following the service of any petition provided for in § 164.37, the other party to the proceeding may file with the Hearing Clerk an answer thereto. As soon as practicable thereafter, the Administrator shall announce his decision whether to grant or to deny the petition. Unless the Administrator shall determine otherwise, operation of the order shall not be stayed pending the decision to grant or to deny the petition. In the event that any such petition is granted by the Administrator, the applicable rules of practice, as set out elsewhere herein, shall be followed. A person filing a petition under this section shall be regarded as the moving party.

§ 164.39 Filing; number of copies.

All documents or papers required or authorized to be filed, except as provided otherwise in the rules in this part, shall be filed with the Hearing Clerk in quadruplicate: *Provided, however,* That where there are more than two parties to the proceeding, a sufficient number of copies shall be filed so as to provide copies for service upon all parties to the proceeding.

§ 164.40 Service; proof of service.

Copies of all documents or papers required or authorized by the rules in this part to be served on any party to a proceeding shall be served by the Hearing Examiner, Hearing Clerk, or by some other employee of the United States. Except as is provided otherwise by the rules in this part, service shall be made either (a) by delivering a copy of the document or paper to the individual to be served or to a member of the partnership to be served or to the president, secretary, or other executive officer or any director of the corporation, organization, or association to be served, or to the attorney or agent of record of such individual, partnership, corporation, organization, or association; (b) by leaving a copy of the document or paper at the principal place of business of such individual, partnership, corporation, organization, or association, or of his or its attorney or agent of record; or (c) by registering or certifying and sending by airmail a copy of the document or paper, addressed to such individual, partnership, corporation, organization, or association, or to his or its attorney or agent of record, at his or its last known residence or principal place of business. Proof of service hereunder shall be made by the affidavit of the person who actually made the service: *Provided, however,* That if the service is made by registered or certified airmail, proof of service shall be made by the return post office receipt. The affidavit or post office receipt contemplated hereby shall be filed with the Hearing Clerk, and the fact of filing thereof shall be noted on the record of proceeding.

§ 164.41 Computation of time.

Saturdays, Sundays, and holidays shall be included in computing the time allowed for the filing of any document or paper: *Provided, however*, That, when such time expires on a Saturday, Sunday, or legal holiday, such period shall be extended to include the next following business day.

§ 164.42 Extension of time.

The time for the filing of any document or paper required or authorized to be filed under the rules in this part may be extended by the Examiner (before the Examiner's report is filed), or by the Administrator (after the Examiner's report is filed), if request for such extension of time is made prior to the final date allowed for such filing, and if in the judgment of the Examiner or the Administrator as the case may be after notice to and consideration of the views of the other party, when practicable, there is good reason for the extension. In this connection consideration shall also be given to the fact that, under the provisions of the act (7 U.S.C. 135b), the Administrator must issue his order not later than 90 days after the completion of the hearing.

PART 180—TOLERANCES AND EXEMPTIONS FROM TOLERANCES FOR PESTICIDE CHEMICALS IN OR ON RAW AGRICULTURAL COMMODITIES

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180.139	1,1-Dichloro-2,2-bis(p-ethylphenyl) ethane; tolerances for residues.
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180.144	[Reserved]
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180.154	O,O-Dimethyl S-[4-oxo-1,2,3-benzotriazin-3(4H)-ylmethyl] phosphorodithioate; tolerances for residues.
180.155	α -Naphthaleneacetic acid; tolerances for residues.
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180.157	1-Methoxycarbonyl-1-propen-2-yl dimethylphosphate and its beta isomer; tolerances for residues.
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180.161	Manganous dimethyldithiocarbamate; tolerance for residues.
180.162	Tetraiodoethylene; tolerance for residues.
180.163	1,1-Bis(p-chlorophenyl)-2,2,2-trichloroethanol; tolerances for residues.
180.164	Terpene polychlorinates; tolerance for residues.
180.165	2,4-D sodium salt; tolerance for residues.
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180.171	Dioxathion; tolerances for residues.
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180.173	Ethion; tolerances for residues.
180.174	Tetradifon; tolerances for residues.
180.175	Maleic hydrazide; tolerances for residues.

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180.176	Coordination product of zinc ion and maneb; tolerances for residues.	180.219	2,3,5-Trilodobenzoic acid; tolerances for residues.	180.256	p-Chlorophenyl - 2,4,5-trichlorophenyl sulfide; tolerances for residues.
180.177	Ronnel; tolerances for residues.	180.220	Atrazine; tolerances for residues.	180.257	Chloroneb; tolerances for residues.
180.178	Ethoxyquin; tolerances for residues.	180.221	O-Ethyl S-phenyl ethylphosphorodithioate; tolerances for residues.	180.258	2-Ethylamino-4-isopropylamino-6-methylthio-s-triazine; tolerances for residues.
180.179	Tartar emetic; tolerances for residues.	180.222	2,4-Bis(isopropylamino)-6-methylthio-s-triazine; tolerances for residues.	180.259	2-(p-tert-Butylphenoxy) cyclohexyl 2-propynyl sulfite; tolerances for residues.
180.180	Orthoarsenic acid.	180.223	2,4-Dichlorophenyl p-nitrophenyl ether; tolerances for residues.	180.260	Norea; tolerances for residues.
180.181	CIPC; tolerance for residues.	180.224	Gibberellic acid; tolerances for residues.	180.261	N-(Mercaptomethyl) phthalimide S-(O,O-dimethyl phosphorodithioate) and its oxygen analog; tolerances for residues.
180.182	Endosulfan; tolerances for residues.	180.225	Aluminum phosphide; tolerances for residues.	180.262	O-Ethyl S,S-dipropylphosphorodithioate; tolerances for residues.
180.183	O,O-Diethyl S-[2-(ethylthio)ethyl] phosphorodithioate; tolerances for residues.	180.226	Diquat; tolerances for residues.	180.263	Phosalone; tolerances for residues.
180.184	Linuron; tolerances for residues.	180.227	Dicamba; tolerances for residues.	180.264	O,O-Diethyl O-2-pyrazinyl phosphorothioate and its oxygen analog; tolerances for residues.
180.185	Dimethyl 2,3,5,6-tetrachloroterephthalate; tolerances for residues.	180.228	S-Ethyl hexahydro-1H-azepine-1-carbothioate; tolerances for residues.	180.265	2-tert-Butylamino-4-ethylamino-6-methylthio-s-triazine; tolerances for residues.
180.186	Tributylphosphorotrithioate; tolerance for residues.	180.229	Fluometuron; tolerances for residues.	180.266	Amiben; tolerances for residues.
180.187	TDE (or DDD); tolerances for residues.	180.230	Diphenamid; tolerances for residues.	180.267	cis-N-1(1,1,2,2-Tetrachloroethyl) thio]-4-cyclohexene-1,2-dicarboximide; tolerances for residues.
180.188	Ammonium sulfamate; tolerances for residues.	180.231	Dichlobenil; tolerances for residues.	180.268	Barban; tolerances for residues.
180.189	Coumaphos; tolerances for residues.	180.232	S-Ethyl diisobutylthiocarbamate; tolerances for residues.	180.269	Aldicarb; tolerances for residues.
180.189	Diphenylamine; tolerances for residues.	180.233	O,O-Dimethyl O-p-(dimethylsulfamoyl) phenyl phosphorothioate including its oxygen analog; tolerances for residues.	180.270	Benzadox; tolerances for residues.
180.191	Folpet; tolerances for residues.	180.233	O,O-Diethyl O-[p(methylsulfinyl) phenyl] phosphorothioate; tolerances for residues.	180.271	Boron; tolerances for residues.
180.192	Calcium arsenate; tolerances for residues.	180.234	O,O-Diethyl O-[p(methylsulfinyl) phenyl] phosphorothioate; tolerances for residues.	180.272	S,S,S-Tributyl phosphorotrithioate; tolerances for residues.
180.193	Copper arsenate; tolerances for residues.	180.235	2,2-Dichlorovinyl dimethyl phosphate; tolerances for residues.	180.273	Trichlorobenzyl chloride; tolerances for residues.
180.194	Lead arsenate; tolerances for residues.	180.236	Triphenyltin hydroxide; tolerances for residues.	180.275	2,4,5,6-Tetrachloroisophthalonitrile; tolerances for residues.
180.195	Magnesium arsenate; tolerance for residues.	180.237	4-(Methylsulfonyl)-2,6-dinitro-N,N-dipropylaniline; tolerances for residues.	180.276	Formetanate hydrochloride; tolerances for residues.
180.196	Sodium arsenate; tolerance for residues.	180.238	S-Propyl butylethylthiocarbamate; tolerances for residues.	180.277	S-2,3-Dichloroallyl diisopropylthiocarbonate; tolerances for residues.
180.197	Inorganic bromides resulting from soil treatment with 1,2-dibromo-3-chloropropane; tolerances for residues.	180.239	Phosphamidon; tolerances for residues.	180.278	Phenmedipham; tolerances for residues.
180.198	O,O-Dimethyl 2,2,2-trichloro-1-hydroxyethyl phosphonate; tolerance for residues.	180.240	S-Propyl dipropylthiocarbamate; tolerances for residues.	180.279	3-(4-Bromo-3-chlorophenyl)-1-methoxy-1-methylurea; tolerances for residues.
180.199	Inorganic bromides resulting from soil treatment with combinations of chloropicrin, methyl bromide, and propargyl bromide; tolerances for residues.	180.241	S-(O,O-Diisopropyl phosphorodithioate) of N-(2-mercaptoethyl) benzenesulfonamide; tolerances for residues.	180.280	Dimethyl phosphate of -alpha-methylbenzyl 3-hydroxy-cis-crotonate;
180.200	2,6-Dichloro-4-nitroaniline; tolerances for residues.	180.242	Thiabendazole; tolerances for residues.	180.281	2-sec-Butyl-4,6-dinitrophenol; tolerances for residues.
180.201	Chlorosulfamic acid; tolerances for residues.	180.243	2-Chloro-4,6-bis(isopropylamino)-s-triazine; tolerances for residues.	180.282	2-Chloro-N,N-diallylacetamide; tolerances for residues.
180.202	p-Chlorophenoxyacetic acid; tolerances for residues.	180.244	Basic zinc sulfate; tolerances for residues.	180.283	2,3,6-Trichlorophenylacetic acid; tolerances for residues.
180.203	2,3,5,6-Tetrachloronitrobenzene; tolerances for residues.	180.245	Streptomycin; tolerances for residues.	180.284	Zinc phosphide; tolerances for residues.
180.204	Dimethoate including its oxygen analog; tolerances for residues.	180.246	Succinic acid 2,2-dimethylhydrazide; tolerances for residues.	180.285	N'-(4-Chloro-o-tolyl)-N,N-dimethylformamide; tolerances for residues.
180.205	Paraquat; tolerances for residues.	180.247	2-Chloroallyl diethylidithiocarbamate; tolerances for residues.	180.286	1-Chloro-2-nitropropane; tolerances for residues.
180.206	Phorate; tolerances for residues.	180.248	Neodecanoic acid; tolerances for residues.	180.287	Decachlorooctahydro-1,3,4-metheno-2H-cyclobuta [cd] pentalene-2-one; tolerances for residues.
180.207	Trifluralin; tolerances for residues.	180.249	2-Chloro-2',6'-diethyl-N-(methoxymethyl) acetanilide; tolerances for residues.	180.288	2-(Thiocyanomethylthio) benzothiazole; tolerances for residues.
180.208	N-Butyl-N-ethyl-a,a,a-trifluoro-2,6-dinitro-p-toluidine; tolerances for residues.	180.250	3-(p-Bromophenyl)-1-methoxy-1-methylurea; tolerance for residues.	180.289	Methanearsonic acid; tolerances for residues.
180.209	Terbacil; tolerances for residues.	180.251	Dodecachlorooctahydro-1,3,4-metheno-2H-cyclobuta [cd] pentalene; tolerances for residues.	180.290	p-Nitrophenyl 2-nitro-4 (trifluoromethyl) phenyl ether; tolerances for residues.
180.210	Bromacil; tolerances for residues.	180.252	2-Chloro-1-(2,4,5-trichlorophenyl) vinyl dimethyl phosphate; tolerances for residues.	180.291	Pentachloronitrobenzene; tolerance
180.211	2-Chloro-N-isopropylacetanilide; tolerances for residues.	180.253	Methomyl; tolerances for residues.	180.292	4-Amino-3,5,6-trichloropicolinic acid; tolerances for residues.
180.212	S-Ethyl cyclohexylethylthiocarbamate; tolerances for residues.	180.254	Carbofuran; tolerances for residues.	180.293	Endothall; tolerances for residues.
180.213	Simazine; tolerances for residues.	180.255	m-(1-Methylbutyl) phenyl methylcarbamate and m-(1-ethylpropyl) phenyl methylcarbamate; tolerances for residues.	180.294	Benomyl; tolerances for residues.
180.214	Fenthion; tolerances for residues.			180.295	4-tert-Butyl-2-chlorophenyl methyl methylphosphorimidate; tolerances for residues.
180.215	Naled; tolerances for residues.			180.296	Dimethyl phosphate of 3-hydroxy-N-methyl-cis-crotonamide; tolerances for residues.
180.216	3-[p-(p-Chlorophenoxy) phenyl] 1,1-dimethylurea; tolerances for residues.				
180.217	Ammoniates of [ethylenebis(dithiocarbamate)] zinc and ethylenebis [dithiocarbamic acid] bimolecular and trimolecular cyclic anhydrosulfides and disulfides; tolerances for residues.				
180.218	Isopropyl 4,4'-dichlorobenziolate; tolerance for residues.				

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180.297	N-1-Naphthyl phthalamic acid; tolerances for residues.
180.308	O,O - Dimethyl phosphorodi - thioate, S-ester with 4-(mercapto-methyl) - 2 methoxy - Δ ² - 1,3,4-thiadiazolin-5-one; tolerances for residues.
180.300	Ethephon; tolerances for residues.
180.301	Carboxin; tolerances for residues.
180.302	Hexachlorophene; tolerances for residues.
180.303	Acetic acid; tolerances for residues.
180.304	Propionic acid; tolerances for residues.
180.305	3,4,5-Trimethyl methyl carbamate and 2,3,5-trimethyl carbamate; tolerances for residues.

Subpart D—Exemptions From Tolerances

180.1001	Exemptions from the requirement of a tolerance.
180.1002	Allethrin (allyl homolog of cinerin I); exemption from the requirement of a tolerance.
180.1003	Ammonia; exemption from the requirement of a tolerance.
180.1004	Carbon disulfide; exemption from the requirement of a tolerance.
180.1005	Carbon tetrachloride; exemption from the requirement of a tolerance.
180.1006	Organic bromide residues from ethylene dibromide; exemption from the requirement of a tolerance.
180.1007	Ethylene dichloride; exemption from the requirement of a tolerance.
180.1008	Chloropicrin; exemption from the requirement of a tolerance.
180.1009	Chloroform; exemption from the requirement of a tolerance.
180.1010	Methylene chloride; exemption from the requirement of a tolerance.
180.1011	Viable spores of the microorganism <i>Bacillus thuringiensis</i> Berliner; exemption from the requirement of a tolerance.
180.1012	1,1,1-Trichloroethane; exemption from the requirement of a tolerance.
180.1013	Sulfur dioxide from use in fumigants for stored grains; exemption from the requirement of a tolerance.
180.1014	Pentane; exemption from the requirement of a tolerance.
180.1015	Sodium propionate; exemption from the requirement of a tolerance.
180.1016	Ethylene; exemption from the requirement of a tolerance.
180.1017	Diatomaceous earth; exemption from the requirement of a tolerance.
180.1018	Ammonium nitrate; exemption from the requirement of a tolerance.
180.1019	Sulfuric acid; exemption from the requirement of a tolerance.
180.1020	Sodium chlorate; exemption from the requirement of a tolerance.

AUTHORITY: The provisions of this Part 180 issued under sec. 408, 68 Stat. 511; 21 U.S.C. 346a, unless otherwise noted.

Subpart A—Definitions and Interpretative Regulations

DEFINITIONS AND INTERPRETATIONS

§ 180.1 Definitions and interpretations.

(a) Administrator, without qualification, means the Administrator of the Environmental Protection Agency.

(b) Agency, without qualification, means the Environmental Protection Agency.

(c) [Reserved]

(d) Pesticides Tolerance Division means the unit established within the Environmental Protection Agency charged with administration of the Pesticide Residue amendment to the Federal Food, Drug, and Cosmetic Act (section 408).

(e) Raw agricultural commodities include, among other things, fresh fruits, whether or not they have been washed and colored or otherwise treated in their unpeeled natural form; vegetables in their raw or natural state, whether or not they have been stripped of their outer leaves, waxed, prepared into fresh green salads, etc.; grains, nuts, eggs, raw milk, meats, and similar agricultural produce. It does not include foods that have been processed, fabricated, or manufactured by cooking, freezing, dehydrating, or milling.

(f) Where raw agricultural commodities bearing residues that have been exempted from the requirement of a tolerance, or which are within a tolerance permitted under section 408 are used, the processed foods will not be considered unsafe within the meaning of section 406 if:

(1) The poisonous or deleterious pesticide residues have been removed to

the extent possible in good manufacturing practice; and

(2) The concentration of the pesticide in the preserved or processed food when ready to eat is not greater than the tolerance permitted on the raw agricultural commodity.

(g) For the purpose of computing fees as required by § 180.33, each group of crops listed in § 180.34(e) is counted as a single raw agricultural commodity in a petition or request for tolerances or exemption from the requirement of a tolerance for a nonsystemic pesticide. As a general rule, when considering a petition or request with respect to a systemic pesticide (see § 180.34(c)) crops shall not be grouped; however, when computing fees in connection with establishing tolerances for negligible residues, each group listed in § 180.34(f) is counted as a single commodity without regard as to whether or not the pesticide is systemic.

(h) Tolerances and exemptions established for pesticide chemicals in or on the general category of raw agricultural commodities listed in column A apply to the corresponding specific raw agricultural commodities listed in column B. However, a tolerance or exemption for a specific commodity in column B does not apply to the general category in column A.

A	B
Beans.....	Green beans, lima beans, navy beans, red kidney beans, snap beans, wax beans, cowpeas, blackeyed peas.
Celery.....	Anise (fresh leaves and stalks only), celery.
Cherries.....	Sour cherries, sweet cherries.
Citrus fruits.....	Grapefruit, lemons, limes, oranges, tangelos, tangerines, citrus citron, kumquats, and hybrids of these.
Melons.....	Cantaloups, casabas, crenshaws, honeydew melons, honey balls, muskmelons, Persian melons, and hybrids of these, watermelons and their hybrids.
Onions.....	Dry bulb onions, green onions, garlic, leeks, shallots, spring onions.
Onions (dry bulbs only).....	Garlic, onions (dry bulb only).
Peppers.....	All varieties of peppers including pimentos and bell, hot, and sweet peppers.
Tangerines.....	Tangelos, tangerines.
Turnip tops or turnip greens.....	Broccoli raab (raab, raab salad), turnip tops (turnip greens).

(i) Unless otherwise specified, tolerances and exemptions established under the regulations in this part apply to residues from only preharvest application of the chemical.

(j) Unless otherwise specified in this paragraph or in tolerance regulations prescribed in this part for specific pesticide chemicals, the raw agricultural commodity to be examined for pesticide residues shall consist of the whole raw agricultural commodity.

(1) The raw agricultural commodity bananas, when examined for pesticide residues, shall not include any crown tissue or stalk.

(2) Shell shall be removed and discarded from nuts before examination for pesticide residues.

(3) Caps (hulls) shall be removed and discarded from strawberries before examination for pesticide residues.

(4) Stems shall be removed and discarded from melons before examination for pesticide residues.

(5) Roots, stems, and outer sheaths (or husks) shall be removed and discarded from garlic bulbs, and only the garlic cloves shall be examined for pesticide residues.

(6) Where a tolerance is established on a root vegetable including tops or with tops, and the tops and the roots are marketed together, they shall be analyzed separately and neither the pesticide residue on the roots nor the pesticide residue on the tops shall exceed the tolerance level, except that in the case of carrots the tops shall be removed and discarded before analyzing roots for pesticide residues.

(7) The crowns (leaves at the top of the fruit) shall be removed and discarded from pineapples before examination for pesticide residues.

(k) The term "pesticide chemical," as defined in § 201(q) of the act, means any substance which, alone, in chemical combination, or in formulation with one or more other substances, is an "economic poison" within the meaning of the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 135-135k) and as defined in § 362.2 of regulations for its enforcement (7 C.F.R. 362.2), as now in force or as hereafter amended, and which is used in the production, storage, or transportation of raw agricultural commodities.

(l) The term "negligible residue" means any amount of a pesticide chemical remaining in or on a raw agricultural commodity or group of raw agricultural commodities that would result in a daily intake regarded as toxicologically insignificant on the basis of scientific judgment of adequate safety data. Ordinarily this will add to the diet an amount which will be less than 1/2,000th of the amount that has been demonstrated to have no effect from feeding studies on the most sensitive animal species tested. Such toxicity studies shall usually include at least 90-day feeding studies in two species of mammals.

(m) The term "nonperishable raw agricultural commodity" means any raw agricultural commodity not subject to rapid decay or deterioration that would render it unfit for consumption. Examples are cocoa beans, coffee beans, field-dried beans, field-dried peas, grains, and nuts. Not included are eggs, milk, meat, poultry, fresh fruits, and vegetables such as onions, parsnips, potatoes, and carrots.

(Sec. 701, 52 Stat. 1055, as amended; 21 U.S.C. 371)

§ 180.2 Pesticide chemicals considered safe.

(a) As a general rule, pesticide chemicals other than benzaldehyde (when used as a bee repellent in the harvesting of honey), ferrous sulfate, lime, lime-sulfur, potassium polysulfide, sodium carbonate, sodium chloride, sodium polysulfide, and sulfur, and, when used postharvest as fungicides, citric acid, fumaric acid, oil of lemon, oil of orange, sodium benzoate, and sodium propionate are not for the purposes of section 408(a) of the act generally recognized as safe for use.

(b) Upon written request, the Pesticides Tolerance Division will advise interested persons whether a pesticide chemical should be considered as poisonous or deleterious, or one not generally recognized by qualified experts as safe.

(c) The training and experience necessary to qualify experts to evaluate the safety of pesticide chemicals for the purposes of section 408(a) are essentially the same as training and experience necessary to qualify experts to serve on advisory committees prescribed by section 408(g). (See § 180.11.)

(Sec. 701, 52 Stat. 1055, as amended; 21 U.S.C. 371)

§ 180.3 Tolerances for related pesticide chemicals.

(a) Pesticide chemicals that cause related pharmacological effects will be regarded, in the absence of evidence to the contrary, as having an additive deleterious action. (For example, many pesticide chemicals within each of the following groups have related pharmacological effects: Chlorinated organic pesticides, arsenic-containing chemicals, metallic dithiocarbamates, cholinesterase-inhibiting pesticides.)

(b) Tolerances established for such related pesticide chemicals may limit the amount of a common component (such as As_2O_3) that may be present, or may limit the amount of biological activity (such as cholinesterase inhibition) that may be present, or may limit the total amount of related pesticide chemicals (such as chlorinated organic pesticides) that may be present.

(c) (1) Where tolerances for inorganic bromide in or on the same raw agricultural commodity are set in two or more sections in this part, the overall quantity of inorganic bromide to be tolerated from use of two or more pesticide chemicals for which tolerances are established is the highest of the separate applicable tolerances. For example, where the bromide tolerance on lima beans from ethylene dibromide soil treatment is 5 parts per million and on lima beans from methyl bromide fumigation is 50 parts per million, the overall inorganic bromide tolerance for lima beans grown on ethylene dibromide treated soil and also fumigated with methyl bromide after harvest is 50 parts per million.

(2) Where tolerances are established in terms of inorganic bromide residues only from use of organic bromide fumigants on raw agricultural commodities, such tolerances are sufficient to protect the public health and no additional concurrent tolerances for the organic pesticide chemicals from such use are necessary. This conclusion is based on evidence of the dissipation of the organic pesticide or its conversion to inorganic bromide residues in the food when ready to eat.

(d) (1) Where tolerances are established for both calcium cyanide and hydrogen cyanide on the same raw agricultural commodity, the total amount of such pesticides shall not yield more residue than that permitted by the larger of the two tolerances, calculated as hydrogen cyanide.

(2) Where tolerances are established for residues of both *O,O*-diethyl *S*-[2-(ethylthio)ethyl] phosphorodithioate and demeton (a mixture of *O,O*-diethyl *O*- and *S*-[2-(ethylthio)ethyl] phosphorothioates) on the same raw agricultural commodity, the total amount of such pesticides shall not yield more residue than that permitted by the larger of the two tolerances, calculated as demeton.

(3) Where tolerances are established for both terpene polychlorinates (chlorinated mixture of camphene, pinene, and

related terpenes, containing 65-66 percent chlorine) and toxaphene (chlorinated camphene containing 67-69 percent chlorine) on the same raw agricultural commodities, the total amount of such pesticides shall not yield more residue than that permitted by the larger of the two tolerances, calculated as a chlorinated terpene of molecular weight 396.6 containing 67 percent chlorine.

(4) Where a tolerance is established for more than one pesticide containing arsenic found in, or on a raw agricultural commodity, the total amount of such pesticide shall not exceed the highest established tolerance calculated as As_2O_3 .

(5) Where tolerances are established for more than one member of the class of dithiocarbamates listed in paragraph (e) (3) of this section on the same raw agricultural commodity, the total residue of such pesticides shall not exceed that permitted by the highest tolerance established for any one member of the class, calculated as zinc ethylenebisdithiocarbamate.

(6) Where tolerances are established for residues of both *S,S,S*-Tributyl phosphorotrithioate and tributyl phosphorotrithioate in or on the same raw agricultural commodity, the total amount of such pesticides shall not yield more residue than that permitted by the higher of the two tolerances, calculated as *S,S,S*-tributyl phosphorotrithioate.

(e) Except as noted in subparagraphs (1) and (2) of this paragraph, where residues from two or more chemicals in the same class are present in or on a raw agricultural commodity the tolerance for the total of such residues shall be the same as that for the chemical having the lowest numerical tolerance in this class, unless a higher tolerance level is specifically provided for the combined residues by a regulation in this part.

(1) Where residues from two or more chemicals in the same class are present in or on a raw agricultural commodity and there are available methods that permit quantitative determination of each residue, the quantity of combined residues that are within the tolerance may be determined as follows:

(i) Determine the quantity of each residue present.

(ii) Divide the quantity of each residue by the tolerance that would apply if it occurred alone, and multiply by 100 to determine the percentage of the permitted amount of residue present.

(iii) Add the percentages so obtained for all residues present.

(iv) The sum of the percentages shall not exceed 100 percent.

(2) Where residues from two or more chemicals in the same class are present in or on a raw agricultural commodity and there are available methods that permit quantitative determinations of one or more, but not all, of the residues, the amounts of such residues as may be determinable shall be deducted from the total amount of residues present and the remainder shall have the same tolerance

as that for the chemical having the lowest numerical tolerance in that class. The quantity of combined residues that are within the tolerance may be determined as follows:

(i) Determine the quantity of each determinable residue present.

(ii) Deduct the amounts of such residues from the total amount of residues present and consider the remainder to have the same tolerance as that for the chemical having the lowest numerical tolerance in that class.

(iii) Divide the quantity of each determinable residue by the tolerance that would apply if it occurred alone and the quantity of the remaining residue by the tolerance for the chemical having the lowest numerical tolerance in that class and multiply by 100 to determine the percentage of the permitted amount of residue present.

(iv) Add the percentages so obtained for all residues present.

(v) The sum of the percentages shall not exceed 100 percent.

(3) The following pesticides are members of the class of dithiocarbamates:

A mixture of 5.2 parts by weight of ammoniates of [ethylenebis (dithiocarbamate)] zinc with 1 part by weight ethylenebis (dithiocarbamic acid) bimolecular and trimolecular cyclic anhydrosulfides and disulfides.

2-Chloroallyl diethyldithiocarbamate.
Coordination product of zinc ion and maneb containing 30 percent manganese, 2.5 percent zinc, and 77.5 percent ethylenebis-dithiocarbamate.

Ferbam.
Maneb.
Manganous dimethyldithiocarbamate.
Sodium dimethyldithiocarbamate.
Thiram.
Zineb.
Ziram.

(4) The following are members of the class of chlorinated organic pesticides:

Aldrin.
BHC (benzene hexachloride).
1,1 - Bis(p-chlorophenyl) - 2,2,2-trichloroethanol.
Chlorobenzide (p-chlorobenzyl p-chlorophenyl sulfide).
Chlordane.
Chlorobenzilate (ethyl 4,4'-dichlorobenzilate).

p-Chlorophenoxyacetic acid.
p-Chlorophenyl-2,4,5-trichlorophenyl sulfide.

2,4-D (2,4-dichlorophenoxyacetic acid).
DDD (TDE).
DDT.

1,1 - Dichloro - 2,2 - bis(p-ethylphenyl) ethane.

2,6-Dichloro-4-nitroaniline.
2,4-Dichlorophenyl p-nitrophenyl ether.
Dieldrin.

Dodecachlorooctahydro - 1,3,4 - metheno - 2H-cyclobuta[cd] pentalene.

Endosulfan (6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a - hexahydro - 6,9 - methano - 2,4,3 - benzodioxathiepin-3-oxide).

Endosulfan sulfate (6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a - hexahydro - 6,9 - methano - 2,4,3 - benzodioxathiepin-3,3-dioxide).

Heptachlor (1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-4,7-methanoindene).

Heptachlor epoxide (1,4,5,6,7,8,8-heptachloro - 2,3 - epoxy - 2,3,3a,4,7,7a-hexahydro-4,7-methanoindene).

Hexachlorophene (2,2'-methylenebis(3,4,6-trichlorophenol)) and its monosodium salt.

Isopropyl 4,4'-dichlorobenzilate.

Lindane.

Methoxychlor.

Oxev (p-chlorophenyl p-chlorobenzenesulfonate).

Sesone (sodium 2,4-dichlorophenoxyethyl sulfate, SES).

Sodium 2,4-dichlorophenoxyacetate.

Sulphenone (p-chlorophenyl phenyl sulfone).

Terpene polychlorinates (chlorinated mixture of camphene, pinene, and related terpenes 65-66 percent chlorine).

2,3,5,6-Tetrachloronitrobenzene.

Tetradifon (2,4,5,4'-tetrachlorodiphenyl sulfone).

Toxaphene (chlorinated camphene).

Trichlorobenzic acid.

Trichlorobenzyl chloride.

(5) The following are members of the class of cholinesterase-inhibiting pesticides:

Aldicarb (2-methyl-2-(methylthio)propionaldehyde O-(methylcarbamoyl) oxime) and its cholinesterase-inhibiting metabolites 2-methyl-2-(methylsulfinyl) propionaldehyde O-(methylcarbamoyl) oxime and 2-methyl-2-(methylsulfonyl) propionaldehyde O-(methylcarbamoyl) oxime.

Carbaryl (1-naphthyl N-methylcarbamate).

Carbofuran (2,3-dihydro-2,2-dimethyl-7-benzofuranyl N-methylcarbamate).

Carbofuran metabolite (2,3-dihydro-2,2-dimethyl-3-hydroxy-7-benzofuranyl N-methylcarbamate).

Carbophenothion (S-(p-chlorophenylthio)methyl) O,O-diethyl phosphorodithioate).
2-Chloro-1-(2,4,5-trichlorophenyl) vinyl dimethyl phosphite.

Coumaphos (O,O-diethyl O-3-chloro-4-methyl-2-oxo-2H-1-benzopyran-7-yl phosphorothioate).

Comaphos oxygen analog (O,O-diethyl O-3-chloro-4-methyl-2-oxo-2H-1-benzopyran-7-yl phosphite).

Demeton (a mixture of O,O-diethyl O-(and S-) [2-(ethylthio)ethyl] phosphorothioates).

2,2-Dichlorovinyl dimethyl phosphite.
O,O-Diethyl S-[2-(ethylthio)ethyl] phosphorodithioate and its cholinesterase-inhibiting metabolites.

O,O-Diethyl O-(2-isopropyl-4-methyl-6-pyrimidinyl) phosphorothioate.

O,O-Diethyl O-[p-(methylsulfinyl)phenyl] phosphorothioate and its cholinesterase-inhibiting metabolites.

Diethyl 2-pyrazinyl phosphite.
O,O-Diethyl O-2-pyrazinyl phosphorothioate.

S-(O,O-Diisopropyl phosphorodithioate) of N-(2-mercaptoethyl) benzenesulfonamide.

S-(O,O-Diisopropyl phosphorothioate) of N-(2-mercaptoethyl) benzenesulfonamide.

Dimethoate (O,O-dimethyl S-(N-methylcarbamoylmethyl) phosphorodithioate).

Dimethoate oxygen analog (O,O-dimethyl S-(N-methylcarbamoylmethyl) phosphorothioate).

O,O-Dimethyl O-p-(dimethylsulfamoyl) phenyl phosphite.

O,O-Dimethyl O-p-(dimethylsulfamoyl) phenyl phosphorothioate.

O,O-Dimethyl O-[4-(methylthio)-m-tolyl] phosphorothioate and its cholinesterase-inhibiting metabolites.

O,O-Dimethyl S-[4-oxo-1,2,3-benzotriazin-3-(4H)-ylmethyl] phosphorodithioate.

Dimethyl phosphite of α -methylbenzyl 3-hydroxy-cis-crotonate.

Dimethyl phosphite of 3-hydroxy-N-methyl-cis-crotonamide.

O,O-Dimethyl 2,2,2-trichloro-1-hydroxyethyl phosphonate.

O,O-Dimethyl phosphorodithioate, S-ester with 4-(mercaptomethyl)-2-methoxy- Δ^2 -1,3,4-thiadiazolin-5-one.

Dioxathion (2,3-p-dioxanedithiol S,S-bis (O,O-diethylphosphorodithioate)) containing approximately 70 percent cis and trans isomers and approximately 30 percent related compounds.

EPN.

Ethephon ((2 - chloroethyl) phosphonic acid).

Ethion.

Ethion oxygen analog (S-[[diethoxyphosphinothioyl]thio] methyl]O,O-diethyl phosphorothioate).

O-Ethyl S,S-dipropylphosphorodithioate.

O-Ethyl S-phenyl ethylphosphonodithioate.

O-Ethyl S-phenyl ethylphosphonothioate, m - (1 - Ethylpropyl)phenyl methylcarbamate.

Malathion.
N-(Mercaptomethyl) phthalimide S-(O,O-dimethyl phosphorodithioate).

N-(Mercaptomethyl) phthalimide S-(O,O-dimethyl phosphorothioate).

Methomyl (S-methyl N-[(methylcarbamoyl)oxy]thioacetimidate).

1-Methoxycarbonyl-1-propen-2-yl dimethyl phosphite and its beta isomer.

m-(1-Methylbutyl)phenyl methylcarbamate.

Methyl parathion.

Naled (1,3-dibromo-2,2-dichloroethyl dimethyl phosphite).

Parathion.
Phorate (O,O-diethyl S-(ethylthio)methyl phosphorodithioate) and its cholinesterase-inhibiting metabolites.

Phosalone (S-(6-chloro-3-mercaptomethyl) - 2 - benzoxazolone) O,O - diethyl phosphorodithioate).

Phosphamidon (2-chloro-2-diethylcarbamoyl-1-methylvinyl dimethyl phosphite) including all of its related cholinesterase-inhibiting compounds.

Ronnel.
Schradan (octamethylpyrophosphoramide).

4-tert-Butyl-2-chlorophenyl methyl methyl phosphoramidate.

Tributylphosphorotrithioate.
S,S,S-Tributyl phosphorotrithioate.

3,4,5-Trimethylphenyl methylcarbamate and its isomer 2,3,5-trimethylphenyl methylcarbamate.

(6) The following compounds are members of the class of dinitro pesticides:

2-sec-Butyl-4,6-dinitrophenol.

Dinitro-o-cyclohexylphenol.
Dicyclohexylamine salt of dinitro-o-cyclohexylphenol.

§ 180.4 Certification of usefulness and residue estimate.

The time period for the Agency's consideration of a petition will not begin to run until the Administrator of the Environmental Protection Agency certifies that the pesticide chemical involved is useful and gives an opinion whether the tolerance proposed by the petitioner reasonably reflects the amount of residue likely to result when the pesticide chemical is used in the manner proposed. The tolerance thereafter established ordinarily will not exceed that figure which the Administrator of the Environmental Protection Agency states, in his opinion, reasonably reflects the amounts of residue likely to result.

§ 180.5 Zero tolerances.

A zero tolerance means that no amount of the pesticide chemical may remain on the raw agricultural commodity when it is offered for shipment. A zero tolerance for a pesticide chemical in

or on a raw agricultural commodity may be established because, among other reasons:

(a) A safe level of the pesticide chemical in the diet of two different species of warm-blooded animals has not been reliably determined.

(b) The chemical is carcinogenic to or has other alarming physiological effects upon one or more of the species of the test animals used, when fed in the diet of such animals.

(c) The pesticide chemical is toxic, but is normally used at times when, or in such manner that, fruit, vegetables, or other raw agricultural commodities will not bear or contain it.

(d) All residue of the pesticide chemical is normally removed through good agricultural practice such as washing or brushing or through weathering or other changes in the chemical itself, prior to introduction of the raw agricultural commodity into interstate commerce.

§ 180.6 Pesticide tolerances regarding milk, eggs, meat, and/or poultry; statement of policy.

(a) When establishing tolerances for pesticide residues in or on raw agricultural commodities, consideration is always given to possible residues of those pesticide chemicals or their conversion products entering the diet of man through the ingestion of milk, eggs, meat, and/or poultry produced by animals fed agricultural products bearing such pesticide residues. In each instance an evaluation of all available data will result in a conclusion either:

(1) That finite residues will actually be incurred in these foods from feed use of the raw agricultural commodity including its byproducts; or

(2) That it is not possible to establish with certainty whether finite residues will be incurred, but there is a reasonable expectation of finite residues; or

(3) That it is not possible to establish with certainty whether finite residues will be incurred, but there is no reasonable expectation of finite residues.

(b) When the data show that finite residues will actually be incurred in milk, eggs, meat, and/or poultry, a tolerance will be established on the raw agricultural commodity used as feed provided that tolerances can be established at the same time, on the basis of the toxicological and other data available, for the finite residues incurred in milk, eggs, meat, and/or poultry. When it is not possible to determine with certainty whether finite residues will be incurred in milk, eggs, meat, and/or poultry but there is a reasonable expectation of finite residues in light of data reflecting exaggerated pesticide levels in feeding studies, a tolerance will be established on the raw agricultural commodity provided that appropriate tolerances can be established at the same time, on the basis of the toxicological and other data available, for the finite residues likely to be incurred in these foods through the feed use of the raw agricultural commodity or its byproducts. When it is not possible to determine with certainty whether

finite residues will be incurred in milk, eggs, meat, and/or poultry but there is no reasonable expectation of finite residues in light of data such as those reflecting exaggerated pesticide levels in feeding studies and those elucidating the biochemistry of the pesticide chemical in the animal, a tolerance may be established on the raw agricultural commodity without the necessity of a tolerance on food products derived from the animal.

(c) The principles outlined in paragraphs (a) and (b) of this section will also be followed with respect to tolerances for residues which will actually be incurred or are reasonably to be expected in milk, eggs, meat, and/or poultry by the use of pesticides directly on the animal or administered purposely in the feed or drinking water.

(d) Tolerances contemplated by paragraphs (a) and (b) of this section will in addition to toxicological considerations be conditioned on the availability of a practicable analytical method to determine the pesticide residue; that is, the method must be sensitive and reliable at the tolerance level or in special cases at a higher level where such level is deemed satisfactory and safe in light of the toxicity of the pesticide residue and of the unlikelihood of such residue exceeding the tolerance. The analytical methods to be used for enforcement purposes will be those set forth in the "Pesticide Analytical Manual" (see § 180.101 (c)). The sensitivities of these methods are expressed in that manual. (Sec. 701(a), 68 Stat. 511 et seq.; 21 U.S.C. 371(a))

Subpart B—Procedural Regulations
PROCEDURE FOR FILING PETITIONS

§ 180.7 Petitions proposing tolerances or exemptions for pesticide residues in or on raw agricultural commodities.

(a) Petitions to be filed with the Agency under the provisions of section 408(d) shall be submitted in duplicate to the Pesticides Tolerance Division. If any part of the material submitted is in a foreign language, it shall be accompanied by an accurate and complete English translation. The petition shall be accompanied by an advance deposit for fees described in § 180.33. The petition shall state petitioner's mail address to which notice of objection under section 408(d) (5) may be sent.

(b) Petitions shall include the following data and be submitted in the following form:

(Date)

Pesticides Tolerance Division,
Environmental Protection Agency,
Washington, D.C. 20250

Dear Sirs:

The undersigned, -----, submits this petition pursuant to section 408 (d) (1) of the Federal Food, Drug, and Cosmetic Act with respect to the pesticide chemical -----

Attached hereto, in duplicate and constituting a part of this petition, are the following:

A. The name, chemical identity, and composition of the pesticide chemical. (If the

pesticide chemical is an ingredient of an economic poison, the complete quantitative formula of the resulting economic poison should be submitted. The submission of this information does not restrict the application of any tolerance or exemption granted to the specific formula(s) submitted.)

B. The amount, frequency, and time of application of the pesticide chemical.

C. Full reports of investigations made with respect to the safety of the pesticide chemical. (These reports should include, where necessary, detailed data derived from appropriate animal or other biological experiments in which the methods used and the results obtained are clearly set forth.)

D. The results of tests on the amount of residue remaining, including a description of the analytical method used. (See § 180.34 for further information about residue tests.)

E. Practicable methods for removing residue that exceeds any proposed tolerance.

F. Proposed tolerances for the pesticide chemical if tolerances are proposed.

G. Reasonable grounds in support of the petition.

Enclosed is (money order, bank draft, or certified check) for \$-----, payable to the Environmental Protection Agency to cover clerical operations, initial administrative review, and the cost incurred in considering the petition after it has been filed.

Very truly yours,

(Petitioner)
Per -----

(Indicate authority)

Mail address -----

This petition must be signed by the petitioner or by his attorney or agent, or (if a corporation) by an authorized official.

The data specified under the several lettered headings should be on separate sheets or sets of sheets, suitably identified. If such data have already been submitted with an earlier application, the present petition may incorporate it by reference to the earlier one.

The petition shall be submitted in duplicate. The petitioner shall show that he has registered or has submitted an application for the registration of an economic poison containing the pesticide chemical under the Federal Insecticide, Fungicide, and Rodenticide Act.

(c) Except as noted in paragraph (d) of this section, a petition shall not be accepted for filing if any of the data prescribed by section 408(d) are lacking or are not set forth so as to be readily understood. Data in a petition entitled to protection as a trade secret will be held confidential and not revealed unless it is necessary to do so in administrative or judicial proceedings under section 408.

(d) The Pesticides Tolerance Division shall notify the petitioner within 15 days after its receipt of acceptance or non-acceptance of a petition, and if not accepted the reasons therefor. Copy of the notice shall be sent to the Pesticides Regulation Division, Environmental Protection Agency. If accepted, the date of notification becomes the date of filing for the purposes of section 408(d) (1). If petitioner desires, he may supplement a deficient petition after notification as to deficiencies. Each supplement shall be accompanied by a deposit of fees as specified in § 180.33 (e). If the supplementary material or explanation of petition is deemed acceptable, petitioner shall be notified, and date of such notification

becomes the date of filing. If the petitioner does not wish to supplement or explain the petition and requests in writing that it be filed as submitted, the petition shall be filed and the petitioner so notified. The date of such notification becomes the date of filing. The Administrator shall publish in the FEDERAL REGISTER within 30 days a notice of filing, name of petitioner, and a brief outline of the petition, including description of analytical method or reference to a publication in which it appears, if such publication is generally available.

(e) The Pesticides Tolerance Division may request a sample of the pesticide chemical at any time while a petition is under consideration. The Pesticides Tolerance Division shall specify in its request for a sample of the pesticide chemical, a quantity which it deems adequate to permit tests of analytical methods used to determine residues of the pesticide chemical and of methods proposed by the petitioner for removing any residues of the chemical that exceed the tolerance proposed. The date used for computing the 90-day limit for the purposes of section 408(d)(2) shall be moved forward 1 day for each day in excess of 15 from the mailing date of the request taken by the petitioner to submit the sample. If the sample is not submitted within 180 days after mailing date of the request, the petition will be considered withdrawn without prejudice.

(f) The date of receipt from the Administration of certification as to usefulness shall be the date used for computing the 90-day limit for the purposes of section 408(d)(2).

(g) Unless the petition is referred to an advisory committee, the Administrator shall publish in the FEDERAL REGISTER within 90 days after receipt of the certification of usefulness, a regulation establishing a tolerance for residues of the pesticide chemical or exempting such residues from the necessity of a tolerance, as provided in section 408(d)(2) of the act.

(Sec. 701, 52 Stat. 1055, as amended; 21 U.S.C. 371)

§ 180.8 Withdrawal of petitions without prejudice.

In some cases the Pesticides Tolerance Division or an advisory committee to which the petition has been referred will notify the petitioner that the petition, while technically complete, is inadequate to justify the establishment of a tolerance or the tolerance requested by petitioner. This may be due to the fact that the data are not sufficiently clear or complete. In such cases, the petitioner may withdraw the petition pending its clarification or the obtaining of additional data. This withdrawal may be without prejudice to a future filing. Upon refiling, the time limitation will begin to run anew from the date of refiling or the date of receipt of certification from the Administrator, whichever is later. A deposit for fees as specified in § 180.33(f) shall accompany the resubmission of the petition.

(Sec. 701, 52 Stat. 1055, as amended; 21 U.S.C. 371)

§ 180.9 Substantive amendments to petitions.

After a petition has been filed or referred to an advisory committee, the petitioner may submit additional information or data in support thereof, but in such cases the petition will be given a new filing date or a new initial date of consideration by the advisory committee, and the time limitation will begin to run anew. The additional data shall be accompanied by a deposit of fees as specified in § 180.33(g).

ADVISORY COMMITTEES

§ 180.10 Referral of petition to advisory committee.

(a) If within the prescribed period a person filing a petition requests that the petition be referred to an advisory committee, he shall make such request in writing to the Administrator and forward with such request an advance deposit for fees prescribed by § 180.33(i)(3).

(b) If further advance deposits are not made upon request of the Administrator, as provided for in § 180.33(i)(3), the request for referral of the petition to an advisory committee shall be considered withdrawn, and a tolerance shall be established within 90 days of the date on which the Administrator requested the further advance deposit.

(c) In case the Administrator on his own initiative deems it necessary to refer a petition to an advisory committee, he shall, in writing, so inform the person filing the petition.

§ 180.11 Appointment of advisory committee.

(a) Whenever the referral of a petition or proposal to an advisory committee is requested or the Administrator otherwise deems such referral necessary, the Administrator will request the National Academy of Sciences, National Research Council, to select qualified experts, including at least one representative from land-grant colleges, willing to serve on the advisory committee. All such experts shall have had sufficient training and experience in biology, medicine, physiology, toxicology, pharmacology, veterinary medicine, or other appropriate science to evaluate the safety of pesticide chemicals. The Administrator will request the National Academy of Sciences, when it furnishes the names of such experts, to supply a biographical sketch showing the background of their experience and their connection, if any, with academic and commercial institutions.

(b) Each advisory committee shall consist of not less than three experts, at least one of whom is a representative from a land-grant college. The Administrator may specify a larger number to serve. He shall appoint one member of the committee as chairman, and the chairman shall be the spokesman of the committee for receiving and forwarding reports and other functions of the committee.

(c) The Administrator shall appoint the experts so selected and fix their compensation at not to exceed the maximum permitted by other authority per day for each day or part thereof spent in committee meetings and in traveling to and from committee meetings held outside the city of their residence, plus necessary traveling and subsistence expenses while the experts are serving away from their places of residence. Subsistence expenses shall not exceed the maximum per diem permitted by other authority.

§ 180.12 Procedure for advisory committee.

(a) The Administrator shall submit to the chairman of the committee the petition for tolerances, together with certification by the Administrator and such other relevant, reliable information as may be available. When the Administrator submits a proposal to an advisory committee, he shall inform the petitioner and furnish him with copies of material other than the petition and certification that is furnished the committee. The chairman of the committee shall acknowledge receipt of the information and readiness of the committee to act. The date of receipt of such information shall be considered the beginning of the period allowed for consideration by the committee. Copy of this acknowledgment shall be forwarded to the petitioner by the chairman of the committee.

(b) A secretariat to advisory committees will be established by the Administrator. The secretariat shall furnish members of the committee with copies of the proposal or petition, certification from the Administrator, and any data received by the chairman. If the chairman of the committee believes that a meeting of the committee is necessary before making a recommendation, he shall so advise the Administrator. Such meetings shall be held in Washington, D.C., or such other place as the Administrator may designate. The Administrator shall furnish a suitable meeting place for the committee. If a meeting is held, the secretariat shall keep the minutes and provide clerical assistance.

(c) As soon as practicable, but not later than 60 days after receipt of proposal or petition (unless the time has been extended as provided in paragraph (d) of this section), the chairman shall certify to the Administrator the report of the committee, including any minority report, and shall return the petition for tolerances and the certification. The report will include copies of all relevant material considered by the committee, except that in the case of scientific literature readily available in scientific libraries proper reference may be made to it instead of furnishing actual copies. The report of the advisory committee shall be available for inspection by any interested person after a tolerance or exemption resulting from the petition is published.

(d) If at any time within 60 days, the chairman believes that the advisory committee needs more time, he shall so inform the Administrator in writing, in which case he shall make the certification contemplated by section 408(d) (3) of the act within the additional 30 days.

(e) The date of receipt of the committee report will be the date for computing time for the Administrator to act for the purposes of both sections 408 (d) (3) and (e).

(f) The chairman of the committee, after consultation with the committee members, will inform the National Academy of Sciences of the committee's opinion as to the member who may best represent the committee at a hearing, if one occurs.

(g) More than one petition or proposal may be handled by a committee concurrently.

(h) Persons authorized under section 408(h) to discuss proposals or petitions with the committee shall notify the chairman and if practicable make appointments through him. The report of the committee shall show the names of persons other than committee members discussing proposals or petitions with the committee. Except for discussions with authorized persons the committee shall not disclose data originating with a petitioner prior to publication of a regulation.

PROCEDURE FOR FILING OBJECTIONS AND HOLDING A PUBLIC HEARING

§ 180.13 Objections to regulations and requests for hearings.

(a) Objections under section 408(d) (5) shall be submitted in quintuplicate to the hearing clerk of the Agency and shall be accompanied by a filing fee as specified in § 180.33(h). Each objection to a provision of the regulation shall be separately numbered.

(b) A statement of objections shall not be accepted for filing if:

(1) It fails to establish that the objector is adversely affected by the regulation; or

(2) It does not specify with particularity the provisions of the regulation to which objection is taken; or

(3) It does not state reasonable grounds for each objection raised. Grounds which it is reasonable to conclude are capable of being established by reliable evidence at the hearing and which if proved would call for changing the provisions specified in the objections will be deemed reasonable grounds.

(c) If the statement of objections may not be filed, the Administrator shall inform the objector of the reasons.

(d) If objections to a regulation issued pursuant to a petition are filed by a person other than the petitioner, the Agency shall send a copy of the objections by certified mail, return receipt requested, to the petitioner at the address given in the petition. Petitioner shall have 2 weeks from the date of receipt of the objections to make written reply.

§ 180.14 Public hearing; notice.

If the objections and statements filed by any person, when they are considered with the record in the proceeding (including any reply to the objections that the petitioner may have filed) show that the person filing the objections is adversely affected and that the grounds stated in support of the objections are reasonable, the Administrator shall cause to be published in the FEDERAL REGISTER a notice reciting the objections and announcing a public hearing to receive evidence on them. The notice shall designate the place where the hearing will be held, specify the time within which appearances must be filed, and specify the time (not earlier than 30 days after the date of the notice) when the hearing will start. The hearing shall convene at the place and time announced in the notice but thereafter it may be moved to a different place and may be continued from day to day or recessed to a later day without other notice than announcement thereof by the presiding officer at the hearing.

§ 180.15 Presiding officer.

The hearing shall be conducted by a presiding officer, who shall be a hearing examiner appointed as provided in the Administrative Procedure Act and designated by the Administrator for conducting the hearing. Any such designation may be made or revoked by the Administrator at any time. Hearings shall be conducted in an informal but orderly manner in accordance with these regulations and the requirements of the Administrative Procedure Act. The presiding officer shall have the power to administer oaths and affirmations; to request the member of an advisory committee designated as provided by section 408(d) (5) to testify with respect to the report and recommendations of the committee; to rule upon offers of proof and admissibility of evidence; to receive relevant evidence; to examine witnesses; to regulate the course of the hearing; to hold conferences for the simplification of the issues, and to dispose of procedural requests; but he shall not have power to decide any motion that involves final determination of the merits of the proceeding.

§ 180.16 Parties; burden of proof; appearances.

At the hearing, the person whose objections raised the issues to be determined shall be, within the meaning of section 7(c) of the Administrative Procedure Act, the proponent of the order sought, and accordingly shall have the burden of proof. Any interested person shall be given an opportunity to appear at the hearing, either in person or by his authorized representative, and to be heard with respect to matters relevant to the issues raised by the objections. Any interested person who desires to be heard at the hearing in person or through a representative shall, within

the time specified in the notice of hearing, file with the presiding officer a written notice of appearance setting forth his name, address, and employment. If such person desires to be heard through a representative, such person or such representative shall file with the presiding officer a written appearance setting forth the name, address, and employment of such person. Any person or representative shall state with particularity in the appearance his interest in the proceedings and shall set forth the specific provisions of the regulations concerning which objections have been made on which such person desires to be heard. The appearance shall also set forth with particularity the position to be taken concerning the objections on which he wishes to be heard. No person shall be heard if he failed to file his appearance within the time prescribed in the absence of a clear showing of good cause why the appearance was not filed. All present at the hearing shall conform to all reasonable standards of orderly and ethical conduct.

§ 180.17 Prehearing and other conferences.

(a) The presiding officer, on his own motion, or on the motion of any party or his representative, may direct all parties or their representatives to appear at a specified time and place for a conference to consider:

- (1) The simplification of the issues.
- (2) The possibility of obtaining stipulations, admissions of facts and documents.
- (3) The limitation of the number of expert witnesses.
- (4) The scheduling of witnesses to be called.
- (5) The advance submission of all documentary evidence.
- (6) Such other matters as may aid in the disposition of the proceeding.

The presiding officer shall make an order which recites the action taken at the conference, the agreements made by the parties or their representatives, and the schedule of witnesses, and which limits the issues for hearing to those not disposed of by admissions or agreements. Such order shall control the subsequent course of the proceeding unless modified for good cause by subsequent order.

(b) The presiding officer may also direct all parties and their representatives to appear at conferences at any time during the hearing with a view to simplification, clarification, or shortening of the hearing.

§ 180.18 Submission of documentary evidence in advance.

(a) All documentary evidence to be offered at the hearing shall be submitted to the presiding officer and to the parties sufficiently in advance of the offer of such documentary evidence for introduction into the record to permit study and preparation of cross-examination and rebuttal evidence.

(b) The presiding officer, after consultation with the parties at a conference called in accordance with § 180.17, shall make an order specifying the time at which documentary evidence shall be submitted. He shall also specify in his order the time within which objection to the authenticity of such document must be made to comply with paragraph (d) of this section.

(c) Documentary evidence not submitted in advance in accordance with the requirements of paragraphs (a) and (b) of this section shall not be received in evidence in the absence of a clear showing that the offering party had good cause for his failure to produce the evidence sooner.

(d) The authenticity of all documents submitted in advance shall be deemed admitted unless written objection thereto is filed with the presiding officer upon notice to the other parties within the time specified by the presiding officer in accordance with paragraph (b) of this section, except that a party will be permitted to challenge such authenticity at a later time upon a clear showing of good cause for failure to have filed such written objection.

§ 180.19 Excerpts from documentary evidence.

When portions only of a document are to be relied upon, the offering party shall prepare the pertinent excerpts, adequately identified, and shall supply copies of such excerpts, together with a statement indicating the purpose for which such materials will be offered, to the presiding officer and to the other parties. Only the excerpts, so prepared and submitted, shall be received in the record. However, the whole of the original document should be made available for examination and for use by opposing counsel for purposes of cross-examination.

§ 180.20 Submission and receipt of evidence.

(a) Each witness shall, before proceeding to testify, be sworn or make affirmation.

(b) When necessary to prevent undue prolongation of the hearing, the presiding officer may limit the number of times any witness may testify, the repetitious examination and cross-examination of witnesses, or the amount of corroborative or cumulative evidence.

(c) The presiding officer shall admit only evidence which is relevant, material, and not unduly repetitious.

(d) Opinion evidence shall be admitted when the presiding officer is satisfied that the witness is properly qualified.

(e) The presiding officer shall file as exhibits the FEDERAL REGISTER promulgating the regulation to which objections were taken and any report, recommendations, underlying data, and reasons that were certified to the Administrator by an advisory committee pursuant to section 408(d) (3). The report, recommendations, underlying data, and reasons shall be subject to section 7(c) of the Administrative Procedure Act. All documents constituting the record ac-

cumulated up to the start of the hearing shall be open for inspection by interested persons during office hours in the office of the hearing clerk of the Agency.

(f) The member of an advisory committee, if any, designated to testify, or any member requested to testify by the petitioner, the Agency, or the presiding officer, or who upon his own initiative requests to be heard, shall appear and testify with respect to the report, recommendations, underlying data, and reasons of the committee. The designated member shall receive per diem and travel and subsistence expenses when incurred, as though he were attending a meeting of the advisory committee.

(g) If any person objects to the admission or rejection of any evidence or to other limitation of the scope of any examination or cross-examination, he shall state briefly the grounds for such objection, and the transcript shall not include extended argument or debate thereon except as ordered by the presiding officer. A ruling of the presiding officer on any such objection shall be a part of the transcript, together with such offer of proof as has been made.

§ 180.21 Transcript of the testimony.

Testimony given at a hearing shall be reported verbatim. All written statements, charts, tabulations, and similar data offered in evidence at the hearing shall be marked for identification and, upon a showing satisfactory to the presiding officer of their authenticity, relevancy, and materiality, shall be received in evidence subject to the Administrative Procedure Act (sec. 7(c), 60 Stat. 238; 5 U.S.C. 1006(c)). Exhibits shall, if practicable, be submitted in quintuplicate. In case the required number of copies are not made available, the presiding officer shall exercise his discretion as to whether said exhibit shall be read in evidence or whether additional copies shall be required to be submitted within a time to be specified by the presiding officer. Where the testimony of a witness refers to a statute or to a report or document, the presiding officer shall, after inquiry relating to the identification of such statute, report, or document, determine whether the same shall be produced at the hearing and physically be made a part of the evidence by reference. Where relevant and material matter offered in evidence is embraced in a report or document containing immaterial and irrelevant matter, such immaterial and irrelevant matter shall be excluded and shall be segregated insofar as practicable, subject to the direction of the presiding officer.

§ 180.22 Oral and written arguments.

(a) Unless the presiding officer issues an announcement at the hearing authorizing oral argument before him, it shall not be permitted.

(b) The presiding officer shall announce at the hearing a reasonable period within which interested persons may file written arguments based solely upon the evidence received at the hear-

ing, citing the pages of the transcript of the testimony or properly identified exhibits where such evidence occurs.

§ 180.23 Indexing of record.

(a) Whenever it appears to the presiding officer that the record of hearing will be of such length that an index to the record will permit a more orderly presentation of the evidence and reduce delay, the presiding officer shall require counsel for the parties to prepare a daily topical index which will be available to the presiding officer and all parties. Preparation of such an index shall be apportioned among all counsel present in such manner as appears just and proper in the circumstances.

(b) The index should include each topic of testimony upon which evidence is taken, the name of each witness testifying upon the topic, the page of the record at which each portion of his testimony appeared, and the number of each exhibit relating to the topic. The index should also contain the name of each witness, followed by the topics upon which he testified and the page of the record at which such testimony appears.

§ 180.24 Certification of record.

At the close of the hearing, the presiding officer shall afford interested persons a short time (not longer than 1 week, except in unusual cases) in which to point out errors that may have been made in transcribing the testimony. The presiding officer shall promptly thereafter order such corrections made as in his judgment are required to make the transcript conform to the testimony, and he shall certify the transcript of testimony and the exhibits to the Administrator.

§ 180.25 Filing the record of the hearing.

As soon as practicable after the close of the hearing, the complete record of the hearing shall be filed in the office of the Hearing Clerk. The record shall include the transcript of the testimony, and exhibits, and any written arguments that may have been filed.

§ 180.26 Copies of the record of the hearing.

The Agency will make provisions for a stenographic record of the testimony and for such copies of the transcript thereof as it requires for its own purposes. Any person desiring a copy of the record of the hearing or of any part thereof shall be entitled to the same upon payment of the costs thereof.

§ 180.27 Proposed order.

As soon as practicable after the time for filing written arguments has ended the Administrator shall prepare and cause to be published in the FEDERAL REGISTER a proposed order which shall incorporate findings of fact, recommend decisions on the objections which were the subject of the hearing and tentative regulations. The proposed order shall specify a reasonable time, ordinarily not to exceed 30 days, within which any interested person may file exceptions. The

exceptions shall point out with particularity the alleged errors in said proposed order and shall contain a specific reference to the pages of the transcript of the testimony or to the exhibits on which each exception is based. Such exceptions may be accompanied by a memorandum brief.

§ 180.28 Final order.

As soon as practicable after the time for filing exceptions has passed, the record and the exceptions shall be presented to the Administrator and he shall cause to be published in the FEDERAL REGISTER his final order promulgating the regulation.

ADOPTION OF TOLERANCE ON INITIATIVE OF ADMINISTRATOR OR ON REQUEST OF INTERESTED PERSONS; JUDICIAL REVIEW; TEMPORARY TOLERANCES; AMENDMENT AND REPEAL OF TOLERANCES; FEES

§ 180.29 Adoption of tolerance on initiative of Administrator or on request of an interested person.

(a) Upon the request of an interested person (other than a person who has registered or who has submitted an application for the registration of an economic poison under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. 135)) furnishing reasonable grounds therefor, and upon advance deposit to cover fees as prescribed in § 180.33, the Administrator may propose the issuance of a regulation establishing a tolerance for a pesticide chemical or exempting it from the necessity of a tolerance. Reasonable grounds shall include an explanation showing wherein the person has a substantial interest in such a tolerance or exemption from tolerance; information, if available, as to why registrant of the pesticide chemical under the Federal Insecticide, Fungicide, and Rodenticide Act has not petitioned for a tolerance or exemption from a tolerance; and adequate data on subjects outlined in clauses (A), (B), (C), (D), (E), and (F) of section 408(d) (1) of the Federal Food, Drug, and Cosmetic Act. If the Administrator concludes upon studying the request that it does not warrant a proposal for the issuance of a regulation, he shall so inform the person making the request and state the reasons for his decision.

(b) The notice of the proposal shall show whether it is made on the initiative of the Administrator or at the request of an interested person, naming such person.

(c) If within 30 days after publication of the proposal a person who has registered, or who has submitted an application for registration of an economic poison under the Federal Insecticide, Fungicide, and Rodenticide Act containing the pesticide chemical named in the proposal, requests in writing that the proposal be referred to an advisory committee and makes advance deposit as provided by § 180.33(i) (3), the Administrator shall appoint a committee as provided in § 180.11 and refer the proposal and relevant data to such committee. The Agency and the committee shall

proceed as prescribed in section 408 and this part.

(d) If further advance deposits are not made upon request of the Administrator, as provided in § 180.33(i) (3), the request for referral of the petition to an advisory committee shall be considered withdrawn, and a tolerance shall be established within 90 days from the date on which the Administrator requested the further advance deposit.

§ 180.30 Judicial review.

(a) The Administrator hereby designates the Deputy General Counsel, Environmental Protection Agency as the officer upon whom copy of petition for judicial review shall be served. Such officer shall be responsible for filing in the court the record on which the order of the Administrator is based. The record shall be certified by the Administrator.

(b) Before forwarding the record to the court the Agency shall advise the petitioner of costs of preparing it and as soon as payment to cover fees is made shall forward the record to the court.

§ 180.31 Temporary tolerances.

(a) A temporary tolerance (or exemption from a tolerance) established under authority of section 408(j) of the act shall be deemed to be a tolerance (or exemption from the requirement of a tolerance) for the purposes of section 408(a) (1) or (2) of the act.

(b) (1) A request for a temporary tolerance or a temporary exemption from a tolerance by a person who has obtained an experimental permit for a pesticide chemical under the Federal Insecticide, Fungicide, and Rodenticide Act shall be accompanied by a copy of such experimental permit, such data as are available on subjects outlined in clauses (A), (B), (C), (D), (E), (F), and (G) of section 408(d) (1), and an advance deposit to cover fees as provided in § 180.33(d).

(2) Before an experimental permit has been obtained, the Pesticides Tolerance Division upon request of the Environmental Protection Agency or a person who proposes to apply for an experimental permit will consider available data and discuss its adequacy for the purpose of justifying a tolerance or exemption from a tolerance.

(c) A notice of the issuance of a temporary tolerance outlining any restrictions as to use of the chemical imposed under the experimental permit under the Federal Insecticide, Fungicide, and Rodenticide Act may be published in the FEDERAL REGISTER if the Administrator deems such publication desirable.

(d) A temporary tolerance or exemption from a tolerance may be issued for a period designed to allow the orderly marketing of the raw agricultural commodities produced while testing a pesticide chemical under an experimental permit issued under authority of the Federal Insecticide, Fungicide, and Rodenticide Act when the Administrator concludes that the public health can be adequately protected during such marketing. A temporary tolerance or ex-

emption from a tolerance may be revoked if the experimental permit is revoked, or may be revoked at any time if it develops that the application for a temporary tolerance contains a misstatement of a material fact or that new scientific data or experience with the pesticide chemical indicates that it may be hazardous to the public health.

(e) Conditions under which a temporary tolerance is established shall include:

(1) A limitation on the amount of the chemical to be used on the designated crops permitted under the experimental permit.

(2) A limitation for the use of the chemical on the designated crops to bona fide experimental use by qualified persons as indicated in the experimental permit.

(3) A requirement that the person or firm which obtains the experimental permit for which the temporary tolerance is established will immediately inform the Environmental Protection Agency of any reports on findings from the experimental use that have a bearing on safety.

(4) A requirement that the person or firm which obtained the experimental permit for which the temporary tolerance is established will keep records of production, distribution, and performance for a period of 2 years and, on request, at any reasonable time, make these records available to any authorized officer or employee of the Environmental Protection Agency.

§ 180.32 Procedure for amending and repealing tolerances or exemptions from tolerances.

(a) The Administrator on his own initiative or on request from an interested person furnishing reasonable grounds therefor, may propose the issuance of a regulation amending or repealing a tolerance for a pesticide chemical on raw agricultural commodities or granting or repealing an exemption from tolerance for such chemical. Requests for such amendment or repeal shall be made in writing and accompanied by an advance deposit to cover fees as provided in § 180.33(d).

(b) Reasonable grounds shall include an explanation showing wherein the person has a substantial interest in such tolerance or exemption from tolerance and an assertion of facts (supported by data if available) showing that new uses for the pesticide chemical have been developed or old uses abandoned, that new data are available as to toxicity of the chemical, or that experience with the application of the tolerance or exemption from tolerance may justify its amendment or repeal. Evidence that a person has registered or has submitted an application for the registration of an economic poison under the Federal Insecticide, Fungicide, and Rodenticide Act will be regarded as evidence that he has a substantial interest in a tolerance or exemption from the requirement of a tolerance for a pesticide chemical that

consists in whole or in part of the economic poison. New data should be furnished in the form specified in § 180.7(b) for submitting petitions.

(c) The notice announcing the proposal to amend or repeal a regulation shall show whether the proposal was made on the initiative of the Administrator or at the request of an interested person, naming such person. From this point the proceedings shall be the same as prescribed by section 408(e), beginning with the second sentence of that paragraph, and the regulations applicable to section 408 (d), (e), (f), and (g). § 180.33 Fees.

(a) Except as noted in paragraphs (b) and (c) of this section, each petition or request for the establishment of a tolerance shall be accompanied by a deposit of \$3,000, plus \$300 for each raw agricultural commodity more than nine on which the establishment of a tolerance is requested.

(b) Except as noted in paragraph (c) of this section, a petition requesting two or more numerical tolerance levels shall be accompanied by a deposit of \$4,500, plus \$300 for each raw agricultural commodity more than 14 on which the establishment of a tolerance is requested.

(c) Each petition or request for the establishment of a tolerance at a lower numerical level or levels than a tolerance already established for the same pesticide chemical, or for the establishment of a tolerance on additional raw agricultural commodities at the same numerical level as a tolerance already established for the same pesticide chemical, shall be accompanied by a deposit of \$300, plus \$300 for each raw agricultural commodity on which a tolerance is requested.

(d) Each petition or request for an exemption or a temporary exemption from the requirement of a tolerance, a temporary tolerance, or the amendment or repeal of a tolerance or exemption shall be accompanied by a deposit of \$3,000, unless it meets the requirements of subparagraph (1) or (2) of this paragraph.

(1) Such deposit is not required when, in connection with the change sought under this paragraph, a petition or request is filed for the establishment of new tolerances to take the place of those sought to be amended or repealed and a deposit is made as required by paragraph (a) or (b) of this section.

(2) A request for a temporary tolerance for a pesticide chemical which has a tolerance for other uses at the same numerical level shall be accompanied by a deposit of \$300 for clerical handling and initial administrative review, plus \$300 for each raw agricultural commodity on which the temporary tolerance is sought.

(e) If a petition or a request proposing the issuance of a regulation is not accepted for filing or processing because it is technically incomplete, the deposit, less a \$300 fee for clerical handling and initial administrative review, shall be returned unless the petitioner, indicates that he wishes to submit a supplement,

in which case the deposit will be held by the Administrator, and the supplement shall be accompanied by a nonreturnable fee of \$300.

(f) When a petition is withdrawn after filing and resubmitted within 6 months, it shall be accompanied by a deposit of \$900, or by a deposit equal to the one originally submitted, whichever is smaller. If resubmitted after 6 months, it shall be accompanied by the deposit that would be required if it were being submitted for the first time.

(g) After a petition has been filed, any additional information or data submitted in support of it (i.e., any substantive amendment) shall be accompanied by a deposit of \$900 or by a deposit equal to the one originally submitted, whichever is smaller.

(h) Objections under section 408(d) (5) of the act shall be accompanied by a filing fee of \$300.

(i) (1) In the event of a referral of a petition or proposal under this section to an advisory committee, the costs shall be borne by the person who requests the referral of the data to the advisory committee.

(2) Costs of the advisory committee shall include compensation for experts as provided in § 180.11(c) and the expenses of the secretariat, including the costs of duplicating petitions and other related material referred to the committee.

(3) An advance deposit shall be made in the amount of \$2,500 to cover the costs. Further advance deposits of \$2,500 each shall be made upon request of the Administrator when necessary to prevent arrears in the payment of such costs. Any deposits in excess of actual expenses will be refunded to the depositor.

(j) The person who files a petition for judicial review of an order under section 408 (d) (5) or (e) of the act shall pay the costs of preparing the record on which the order is based.

(k) All deposits and fees required by the regulations in this part shall be paid by money order, bank draft, or certified check drawn to the order of the Environmental Protection Agency, collectible at par at Washington, D.C. All deposits and fees shall be forwarded to the Environmental Protection Agency, Washington, D.C., 20250, whereupon after making appropriate record thereof they will be transmitted to the Chief Disbursing Officer, Division of Disbursement, Treasurer of the United States, for deposit to a special account.

(l) The Administrator may waive or refund such fees in whole or in part when in his judgment such action will promote the public interest.

(m) Any person who believes that payment of these fees will work a hardship on him may petition the Administrator to waive or refund the fees.

§ 180.34 Tests on the amount of residue remaining.

(a) Data in a petition on the amount of residue remaining in or on a raw agricultural commodity should establish

the residue that may remain when the pesticide chemical is applied according to directions registered under the Federal Insecticide, Fungicide, and Rodenticide Act, or according to directions contained in an application for registration. These data should establish the residues that may remain under conditions most likely to result in high residues on the commodity.

(b) The petition should establish the reliability of the residue data reported in it. Sufficient information should be submitted about the analytical method to permit competent analysts to apply it successfully.

(c) If the pesticide chemical is absorbed into a living plant or animal when applied (is systemic), residue data may be needed on each plant or animal on which a tolerance or exemption is requested.

(d) If the pesticide chemical is not absorbed into the living plant or animal when applied (is not systemic), it may be possible to make a reliable estimate of the residues to be expected on each commodity in a group of related commodities on the basis of less data than would be required for each commodity in the group, considered separately.

(e) Each of the following groups of crops lists raw agricultural commodities that are considered to be related for the purpose of paragraph (d) of this section. Commodities not listed in this paragraph are not considered as related for the purpose of paragraph (d) of this section. This grouping of crops does not affect the certification of usefulness by the Administrator as contemplated by section 408(l) of the act.

- (1) Apples, crabapples, pears, quinces.
- (2) Avocados, papayas.
- (3) Blackberries, boysenberries, dewberries, loganberries, raspberries.
- (4) Blueberries, currants, gooseberries, huckleberries.
- (5) Cherries, plums, prunes.
- (6) Oranges, citrus citron, grapefruit, kumquats, lemons, limes, tangelos, tangerines.
- (7) Mangoes, persimmons.
- (8) Peaches, apricots, nectarines.
- (9) Beans, peas, soybeans (each in dry form).
- (10) Beans, peas, soybeans (each in succulent form).
- (11) Broccoli, brussels sprouts, cauliflower, kohlrabi.
- (12) Cantaloups, honeydew melons, muskmelons, pumpkins, watermelons, winter squash.
- (13) Carrots, garden beets, sugar beets, horseradish, parsnips, radishes, rutabagas, salsify roots, turnips.
- (14) Celery, fennel.
- (15) Cucumbers, summer squash.
- (16) Lettuce, endive (escarole), Chinese cabbage, salsify tops.
- (17) Onions, garlic, leeks, shallots (green, or in dry bulb form).
- (18) Potatoes, Jerusalem-artichokes, sweetpotatoes, yams.
- (19) Spinach, beet tops, collards, dandelion, kale, mustard greens, parsley, Swiss chard, turnip tops, watercress.

- (20) Tomatoes, eggplants, peppers, pimentos.
- (21) Pecans, almonds, brazil nuts, bush nuts, butternuts, chestnuts, filberts, hazelnuts, hickory nuts, walnuts.
- (22) Field corn, popcorn, sweet corn (each in grain form).
- (23) Milo, sorghum (each in grain form).
- (24) Wheat, barley, oats, rice, rye (each in grain form).
- (25) Clovers, alfalfa, cowpea hay, lespedeza, lupines, peanut hay, pea-vine hay, soybean hay, vetch.
- (26) Corn forage, sorghum forage.
- (27) Sugarcane, cane sorghum.

(f) It may be possible to make a reliable estimate of negligible residues of pesticide chemicals to be expected on each commodity in a designated grouping on the basis of data on a representative number of commodities listed in the following designated groups. Tolerances for negligible residues will be established on the group as a whole following the certification of usefulness (pursuant to section 408(1) of the act) on the group as a whole. This does not affect this Agency's requirements for data for registration of labels for each commodity. Commodities not listed are not considered as included in the groupings for the purpose of this paragraph.

proposed may interact with other pesticide chemicals or other substances to which man is exposed, it may be necessary to require special experimental data regarding potentiation capacities to evaluate the safety of the proposed tolerance. This necessarily will be determined on a case-by-case basis.

Subpart C—Specific Tolerances

§ 180.101 Specific tolerances; general provisions.

(a) The tolerances established for pesticide chemicals in this Subpart C apply to residues resulting from their application prior to harvest or slaughter, unless otherwise stated. Tolerances are expressed in terms of parts by weight of the pesticide chemical per one million parts by weight of the raw agricultural commodity.

(b) The poisonous and deleterious substances for which tolerances are established by the regulations in this Subpart C are named by their common names wherever practicable, otherwise by their chemical names.

(c) The analytical methods to be used for determining whether pesticide residues, including negligible residues, in or on raw agricultural commodities are in compliance with the tolerances established in this Part 120 are identified among the methods contained or referenced in the Food and Drug Administration's "Pesticide Analytical Manual" which is available from the Food and Drug Administration, Department of Health, Education, and Welfare, 200 C Street SW., Washington, D.C. 20204.

Group	Commodities therein
Citrus fruits.....	Citrus citron, grapefruit, kumquats, lemons, limes, oranges, tangelos, tangerines, and hybrids of these.
Cucurbits.....	Cantaloupe, casabas, crenshaws, cucumbers, honey balls, honeydew melons, melons, melon hybrids, muskmelons, Persian melons, pumpkins, summer squash, watermelons and their hybrids, winter squash.
Forage grasses.....	Any grasses (either green or cured) that will be fed to or grazed by livestock, all pasture and range grasses, all grasses grown for hay or silage, corn grown for fodder or silage, sorghum grown for hay or silage, small grains grown for hay, grazing, or silage.
Forage legumes.....	Any crop belonging to the family Leguminosae that is grown for forage (hay, grazing, silage, etc.), alfalfa, beans (for forage), clovers, cowpeas (for forage), cowpea hay, lespedezas, peanuts (for forage), peanut hay, peas (for forage), pea vine hay, trefol, velvet beans (for forage), vetch, soybeans (for forage), soybean hay.
Fruiting vegetables.....	Egg plants, peppers, pimentos, tomatoes.
Grain crops.....	Any crop belonging to the family Graminae that produces mature seed that are used for food or feed, barley, buckwheat, corn (field corn, sweet corn, and popcorn), milo, oats, rice, rye, sorghums (grain), wheat.

Group	Commodities therein
Leafy vegetables.....	Anise (fresh leaf and stock only), beet greens (tops), broccoli, broccoli raab, brussels sprouts, cabbage, cauliflower, celery, Chinese cabbage, collards, dandelion, endive, escarole, fennel, kale, kohlrabi, lettuce, mustard greens, parsely, rhubarb, salsify tops, spinach, sugar beet tops, Swiss chard, turnip greens (tops), watercress.
Nuts.....	Almonds, Brazil nuts, bush nuts, butternuts, cashews, chestnuts, filberts, hazelnuts, hickory nuts, macadamia nuts, pecans, walnuts.
Pome fruits.....	Apples, crabapples, pears, quinces.
Poultry.....	Chickens, ducks, geese, guinea, pheasant, pigeons, quail, turkeys.
Root crop vegetables.....	Beets, carrots, chloory, garlic, green onions, horseradish, Jerusalem artichokes, leeks, onions, parsnips, potatoes, radishes, rutabagas, salsify, shallots, spring onions, sugar beets, sweetpotatoes, turnips, yams.
Seed and pod vegetables.....	Black-eyed peas, cowpeas, dill, edible soybeans, field beans, field peas, garden peas, green beans, kidney beans, lima beans, navy beans, okra, peas, pole beans, snap beans, string beans, wax beans, other beans and peas (except dried beans and peas).
Small fruits.....	Blackberries, blueberries, boysenberries, cranberries, currants, dewberries, elderberries, gooseberries, grapes, huckleberries, loganberries, raspberries.
Stone fruit.....	Apricots, cherries (sour and sweet), damsons, nectarines, pawpaws, peaches, plums, prunes.
Stored commodities other than fruits, grain, and vegetables.....	Cottonseed, dried beans (all), dried peas (all), hay, peanuts.
Stored fruits and vegetables.....	Same crops as specified in this list for cucurbits, fruits, nuts, and vegetables.
Stored grain.....	Same crops as specified in this list for grain crops.

§ 180.102 Sesone; tolerances for residues.

The following tolerances are established for residues of the herbicide sesone (sodium 2,4-dichlorophenoxyethyl sulfate) in or on the raw agricultural commodities indicated:

6 parts per million in or on potatoes, peanuts, peanut hulls, peanut hay.

2 parts per million in or on asparagus, strawberries.

§ 180.103 Captan; tolerances for residues.

Tolerances for residues of fungicide captan (N-trichloromethyl-mercapto-4-cyclohexene-1,2-dicarboximide) in or on raw agricultural commodities from preharvest or postharvest uses or combinations of such uses are established as follows:

100 parts per million in or on beet greens, cherries, lettuce, spinach.

50 parts per million in or on apricots, celery, grapes, leeks, mangoes, nectarines, onions (green), peaches, plums (fresh prunes), shallots.

25 parts per million in or on apples, avocados, blackberries, blueberries (huckleberries), cantaloups, crabapples, cranberries, cucumbers, dewberries, eggplants, garlic, honeydew melons, muskmelons, onions (dry bulb), pears, peppers, pimentos, pumpkins, quinces, raspberries, rhubarb, strawberries, summer squash, tomatoes, watermelons, winter squash.

§ 180.35 Tests for potentiation.

Experiments have shown that certain cholinesterase-inhibiting pesticides when fed together to test animals are more toxic than the sum of their individual toxicities when fed separately. One sub-

stance potentiates the toxicity of the other. Important toxicological interactions also have been observed between pesticides and other substances. Whenever there is reason to believe that a pesticide chemical for which a tolerance is

2 parts per million in or on beets (roots), broccoli, brussels sprouts, cabbage, carrots, cauliflower, collards, cottonseed, kale, mustard greens, peas (dry and succulent), rutabagas (roots), soybeans (dry and succulent), sweet corn (kernels plus cob with husk removed), turnip greens, turnips (roots).

Also, the following tolerances for residues of captan are established on an interim basis pending evaluation of new data to be presented to the Food and Drug Administration before January 1, 1970, on the transmission of such residues to meat, milk, and eggs from feeding cattle or poultry with raw agricultural commodities or their byproducts when such commodities have been treated with captan:

100 parts per million in or on almond hulls.

25 parts per million in or on beans (dry and succulent), grapefruit, lemons, limes, oranges, pineapples, potatoes, tangerines.

2 parts per million in or on almonds.

§ 180.104 Heptachlor and heptachlor epoxide; tolerances for residues.

Tolerances for total residues of the insecticide heptachlor (1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-4,7-methanoindene) and its oxidation product heptachlor epoxide (1,4,5,6,7,8,8-heptachloro-2,3-epoxy-2,3,3a,4,7,7a-hexahydro-4,7-methanoindene) from application of heptachlor in or on raw agricultural commodities are established as follows:

0.1 part per million in or on cabbage, lettuce, rutabagas, snap beans.

Zero in or on alfalfa, apples, barley, beets (including sugar beets), black-eyed peas, brussels sprouts, carrots, cauliflower, cherries, clover, corn, cottonseed, cowpeas, grain sorghum (milo), grapes, grass (pasture and range), kohlrabi, lima beans, meat, milk, oats, onions, peaches, peanuts, peas, pineapple, potatoes, radishes, rye, sugarcane, sweet clover, sweet potatoes, tomatoes, turnips (including tops), wheat.

§ 180.105 Demeton; tolerances for residues.

Tolerances for residues of the insecticide demeton (a mixture of *O,O*-diethyl *O* (and *S*)-2-(ethylthio)ethyl phosphorothioates) in or on raw agricultural commodities are established as follows:

12 parts per million in or on alfalfa hay, clover hay.

5 parts per million in or on almond hulls, barley (green fodder and straw), fresh alfalfa, fresh clover, oats (green fodder and straw), sugar beet tops, and wheat (green fodder and straw).

1.25 parts per million in or on grapes, hops.

0.75 part per million in or on almonds, apples, apricots, barley grain, broccoli, brussels sprouts, cabbage, cauliflower, celery, cottonseed, filberts, grapefruit, lemons, lettuce, muskmelons, nectarines, oat grain, oranges, peaches, pears, peas, pecans, peppers, plums (fresh prunes), potatoes, strawberries, tomatoes, walnuts, wheat grain.

0.5 part per million in or on sugar beets.
0.3 part per million in or on beans, eggplants.

0.2 part per million in or on sorghum grain, sorghum forage.

§ 180.106 Diuron; tolerances for residues.

Tolerances for residues of the herbicide diuron (3-(3,4-dichlorophenyl)-1,1-dimethylurea) in or on raw agricultural commodities are established as follows:

7 parts per million in or on asparagus, Bermudagrass, and Bermudagrass hay.

2 parts per million in or on alfalfa; corn fodder or forage (including sweet corn, field corn, and popcorn); grass crops (other than Bermudagrass); grass hay (other than Bermudagrass hay); hay, forage, and straw of barley, oats, rye, and wheat; hay and forage of birdsfoot trefoil, clover, peas, and vetch; peppermint hay, sorghum fodder and forage.

1 part per million in or on apples, artichokes, barley grain, blackberries, blueberries, boysenberries, citrus fruits, corn in grain or ear form (including sweet corn, field corn, popcorn), cottonseed, currents, dewberries, gooseberries, grapes, huckleberries, loganberries, oat grain, olives, pears, peas, pineapple, potatoes, raspberries, rye grain, sorghum grain, sugarcane, vetch (seed), wheat grain.

1 part per million in or on meat, fat, and meat byproducts of cattle, goats, hogs, horses, and sheep.

0.1 part per million (negligible residue) in or on bananas, nuts.

§ 180.107 Aramite; tolerances for residues.

A tolerance of zero is established for residues of the insecticide Aramite (2-(*p*-tert-butylphenoxy)-isopropyl-2-chloroethyl sulfite) in or on each of the following raw agricultural commodities: Alfalfa, apples, blueberries, cantaloups, celery, cucumbers, grapefruit, grapes, green beans, lemons, muskmelons, oranges, peaches, pears, plums, raspberries, soybeans (whole plant), strawberries, sweet corn (kernels) and forage thereof, tomatoes, watermelons.

§ 180.108 Monuron; tolerances for residues.

Tolerances for residues of the herbicide monuron (3-(*p*-chlorophenyl)-1,1-dimethylurea) are established in or on raw agricultural commodities as follows:

7 parts per million in or on asparagus.

1 part per million in or on avocados, citrus citron, cottonseed, grapefruit, grapes, kumquats, lemons, limes, onions (dry bulbs only), oranges, pineapple, spinach, sugarcane, tangerines.

§ 180.109 Ethyl 4,4'-dichlorobenzilate; tolerances for residues.

Tolerances for residues of the insecticide ethyl 4,4'-dichlorobenzilate (Chlorobenzilate) are established in or on raw agricultural commodities as follows:

15 parts per million in or on almond hulls.

5 parts per million in or on apples, citrus fruits, melons, pears.

0.5 part per million in or on cottonseed and meat, fat, and meat byproducts of cattle and sheep.

0.2 part per million in or on almonds, walnuts.

§ 180.110 Maneb; tolerances for residues.

Tolerances for residues of the fungicide maneb (manganous ethylenebisdithiocarbamate), calculated as zinc ethylenebisdithiocarbamate, are established in or on raw agricultural commodities, as follows:

45 parts per million in or on sugar beet tops.

15 parts per million in or on bananas, of which not more than 2 parts per million shall be in the pulp after peel is removed and discarded. The tolerance applies to accumulative residues from both preharvest and postharvest use.

10 parts per million in or on apricots, beans (succulent form), broccoli, brussels sprouts, cabbage, cauliflower, celery, Chinese cabbage, collards, endive (escarole), kale, kohlrabi, lettuce, mustard greens, nectarines, papayas, peaches, rhubarb, spinach, turnip tops.

7 parts per million in or on apples, beans (dry form), carrots, cranberries, cucumbers, eggplants, figs, grapes, melons, onions, peppers, pumpkins, summer squash, sweet corn (kernels plus cob with husks removed), tomatoes, turnip roots, winter squash.

0.1 part per million in or on almonds, potatoes.

§ 180.111 Malathion; tolerances for residues.

Tolerances are established for residues of the insecticide malathion (*O,O*-dimethyl dithiophosphate of diethyl mercaptosuccinate) in or on raw agricultural commodities as follows:

From preharvest application: 135 parts per million in or on alfalfa, clover, cowpea forage and hay, grass, grass hay, lespedeza hay and straw, lupine hay and straw, peanut forage and hay, soybean forage and hay, and vetch hay and straw.

From preharvest application: 50 parts per million in or on almond hulls.

From preharvest application: 8 parts per million in or on apples, apricots, asparagus, avocados, beans, beets (including tops), blackberries, blueberries, boysenberries, broccoli, brussels sprouts, cabbage, carrots, cauliflower, celery, cherries, collards, corn forage, cranberries, cucumbers, currants, dandelions, dates, dewberries, eggplants, endive (escarole), figs, garlic, gooseberries, grapefruit, grapes, guavas, horseradish, kale, kohlrabi, kumquats, leeks, lemons, lentils, lespedeza seed, lettuce, limes, loganberries, lupine seed, mangos, melons, mushrooms, mustard greens, nectarines, okra, onions (including green onions), oranges, parsley, parsnips, passion fruit, peaches, pears, peas, peavines, peavine hay, pecans, peppermint, peppers, pineapple, plums, potatoes, prunes, pumpkins, quinces, radishes, raspberries, rutabagas, salsify (including tops), shallots,

sorghum forage, soybeans (dry and succulent), spearmint, spinach, squash (both summer and winter), strawberries, sugar beets (tops), Swiss chard, tangerines, tomatoes, turnips (including tops), vetch seed, walnuts, and watercress.

From preharvest and postharvest application: 8 parts per million in or on almonds, peanuts, and the grains of barley, oats, rice, rye, sorghum, and wheat.

From postharvest application: 8 parts per million in or on corn grain.

From preslaughter application: 4 parts per million in or on meat, fat, and meat byproducts from cattle, goats, hogs, horses, poultry, or sheep; the tolerance level shall not be exceeded in any cut of meat or in any meat byproduct from cattle, goats, hogs, horses, poultry, or sheep.

From preharvest application: 2 parts per million in or on corn (kernels plus cob with husk removed) and cottonseed.

From preharvest application: 1 part per million in or on chestnuts, filberts, hops, macadamia nuts, papayas, sugar beets (roots), and sweetpotatoes.

From preharvest application: 0.2 part per million in or on safflower seed.

From application to dairy cows: 0.5 part per million in milk fat reflecting negligible residues in milk.

From application to poultry: 0.1 part per million in eggs.

Where tolerances are established in this section for residues of malathion from both preharvest and postharvest application to the same commodity, the accumulative residues on the commodity from both shall not exceed the tolerance for residues from postharvest application.

§ 180.112 Sulphenone (*p*-chlorophenyl phenyl sulfone); tolerances for residues.

A tolerance of 8 parts per million for residues of the insecticide Sulphenone (*p*-chlorophenyl phenyl sulfone) is established in or on each of the following raw agricultural commodities: Apples, peaches, pears.

§ 180.113 Allethrin (allyl homolog of cinerin I); tolerances for residues.

Tolerances are established for residues of the insecticide allethrin (allyl homolog of cinerin I) as follows:

4 parts per million from postharvest use in or on the following raw agricultural commodities: Apples, blackberries, blueberries (huckleberries), boysenberries, cherries, crabapples, currants, dewberries, figs, gooseberries, grapes, guavas, loganberries, mangoes, muskmelons, oranges, peaches, pears, pineapples, plums (fresh prunes), raspberries, tomatoes.

2 parts per million from postharvest use in or on the following grains: Barley, corn, grain sorghum, milo, oats, rye, wheat.

§ 180.114 Ferbam; tolerances for residues.

Tolerances for residues of the fungicide ferbam (ferric dimethyldithiocarbamate), calculated as zinc ethylenebisdi-

thiocarbamate, in or on raw agricultural commodities are established as follows:

¹7 parts per million in or on apples, apricots, asparagus, beans, beets (with or without tops) or beet greens alone, blackberries, blueberries (huckleberries), boysenberries, broccoli, brussels sprouts, cabbage, carrots, cauliflower, celery, cherries, citrus fruits, collards, corn, cranberries, cucumbers, currants, dates, dewberries, eggplants, gooseberries, grapes, guavas, kale, kohlrabi, lettuce, loganberries, mangoes, melons, mustard greens, nectarines, onions, papayas, peaches, peanuts, pears, peas, peppers, plums (fresh prunes), pumpkins, quinces, radishes (with or without tops) or radish tops, raspberries, rutabagas (with or without tops), or rutabaga tops, spinach, squash, strawberries, summer squash, tomatoes, turnips (with or without tops) or turnip greens, youngberries.

0.1 part per million in or on almonds.

§ 180.115 Zinc; tolerances for residues.

Tolerances for residues of the fungicide zineb (zinc ethylenebisdithiocarbamate) in or on raw agricultural commodities are established as follows:

60 parts per million in or on hops.

25 parts per million in or on beet tops, Chinese cabbage, collards, endive (escarole), kale, lettuce, mustard greens, romaine, spinach, Swiss chard.

¹7 parts per million in or on apples, apricots, beans, beets (garden roots only), blackberries, boysenberries, broccoli, brussels sprouts, cabbage, carrots, cauliflower, celery, cherries, citrus fruits, corn, cranberries, cucumbers, currants, dewberries, eggplants, gooseberries, grapes, guavas, kohlrabi, loganberries, melons, mushrooms, nectarines, onions, parsley, peaches, peanuts, pears, peas, peppers, plums (fresh prunes), pumpkins, quinces, radishes (with or without tops) or radish tops, raspberries, rutabagas (with or without tops) or rutabaga tops, salsify, squash, strawberries, summer squash, tomatoes, turnips (with or without tops) or turnip greens, youngberries.

1 part per million in or on wheat.

§ 180.116 Ziram; tolerances for residues.

Tolerances for residues of the fungicide ziram (zinc dimethyldithiocarbamate), calculated as zinc ethylenebisdithiocarbamate, in or on raw agricultural commodities are established as follows:

¹7 parts per million in or on apples, apricots, beans, beets (with or without tops) or beet greens alone, blackberries, blueberries (huckleberries), boysenberries, broccoli, brussels sprouts, cabbage, carrots, cauliflower, celery, cherries, collards, cranberries, cucumbers, dewberries,

¹ Some of these tolerances were established on the basis of data acquired at the public hearings held in 1950 (formerly § 180.101) and the remainder were established on the basis of pesticide petitions presented under the procedure specified in the amendment to the Federal Food, Drug, and Cosmetic Act by Public Law 518, 83d Congress (68 Stat. 511).

eggplants, gooseberries, grapes, kale, kohlrabi, lettuce, loganberries, melons, nectarines, onions, peaches, peanuts, pears, peas, peppers, pumpkins, quinces, radishes (with or without tops) or radish tops, raspberries, rutabagas (with or without tops) or rutabaga tops, spinach, squash, strawberries, summer squash, tomatoes, turnips (with or without tops) or turnip greens, youngberries.

0.1 part per million in or on almonds, pecans.

§ 180.117 S-Ethyl dipropylthiocarbamate; tolerances for residues.

Tolerances are established for negligible residues of the herbicide S-ethyl dipropylthiocarbamate in or on the raw agricultural commodities almond hulls, asparagus, castor beans, citrus, cotton forage, cottonseed, flaxseed, forage grasses, forage legumes, fruiting vegetables, grain crops, leafy vegetables, nuts, pineapples, root crop vegetables, safflower seed, seed and pod vegetables, small fruits, strawberries, and sunflower seed at 0.1 part per million.

§ 180.118 Dichlone; tolerances for residues.

Tolerances for residues of the fungicide dichlone (2,3-dichloro-1,4-naphthoquinone) are established as follows:

15 parts per million in or on strawberries.

3 parts per million in or on apples, beans, celery, cherries, peaches, plums (fresh prunes), tomatoes.

§ 180.119 EPN; tolerances for residues.

Tolerances for residues of the insecticide EPN (O-ethyl-O-p-nitrophenyl benzene thiophosphonate) in or on raw agricultural commodities are established as follows:

¹3 parts per million in or on apples, apricots, beans, beets (with or without tops) or beet greens alone, blackberries, boysenberries, cherries, citrus fruits, corn, dewberries, grapes, lettuce, loganberries, nectarines, olives, peaches, pears, pineapples, plums (fresh prunes), quinces, raspberries, rutabagas (with or without tops) or rutabaga tops, spinach, strawberries, sugar beets (but not sugar beet tops), tomatoes, turnips (with or without tops) or turnips greens, youngberries.

0.5 part per million in or on almonds, cottonseed, pecans, walnuts.

0.05 part per million (negligible residue) in or on soybeans.

§ 180.120 Methoxychlor; tolerances for residues.

Tolerances are established for residues of the insecticide methoxychlor (2,2-bis(p-methoxyphenyl)-1,1,1-trichloroethane) as follows:

100 parts per million in or on alfalfa, clover, cowpeas, grass for forage, peanut forage, soybean forage.

¹14 parts per million in or on apples, apricots, asparagus, beans, beets (with or without tops) or beet greens alone, blackberries, blueberries (huckleberries), boysenberries, broccoli, brussels sprouts,

¹ See footnote 1 to § 180.115.

cabbage, carrots, cauliflower, cherries, collards, corn, cranberries, cucumbers, currants, dewberries, eggplants, gooseberries, grapes, kale, kohlrabi, lettuce, loganberries, melons, mushrooms, nectarines, peaches, peanuts, pears, peas, peppers, pineapples, plums (fresh prunes), pumpkins, quinces, radishes (with or without tops) or radish tops, raspberries, rutabagas (with or without tops) or rutabaga tops, spinach, squash, strawberries, summer squash, tomatoes, turnips (with or without tops) or turnip greens, youngberries.

7 parts per million in or on sweetpotatoes and yams from preharvest and postharvest application.

3 parts per million in or on the fat of meat from cattle, goats, hogs, horses, or sheep.

2 parts per million in or on the following grains from storage-bin treatment: Barley, corn, oats, rice, rye, sorghum grain, wheat.

1 part per million in or on potatoes. Zero in milk.

§ 180.121 Parathion or its methyl homolog; tolerances for residues.

Tolerances for residues of the insecticide parathion (*O,O*-diethyl-*O-p*-nitrophenyl thio-phosphate) or its methyl homolog in or on raw agricultural commodities are established as follows:

1 part per million in or on alfalfa, apples, apricots, artichokes, avocados, barley, beans, beets (with or without tops) or beet greens alone, blackberries, blueberries (huckleberries), boysenberries, broccoli, brussels sprouts, cabbage, carrots, cauliflower, celery, cherries, citrus fruits, clover, collards, corn, corn forage, cranberries, cucumbers, currants, dates, dewberries, eggplants, endive (escarole), figs, garlic, gooseberries, grapes, grass for forage, guavas, hops, kale, kohlrabi, lettuce, loganberries, mangoes, melons, mustard greens, nectarines, oats, okra, olives, onions, parsnips (with or without tops) or parsnip greens alone, peaches, pea forage, peanuts, pears, peas, peppers, pineapples, plums, (fresh prunes), pumpkins, quinces, radishes (with or without tops) or radish tops, raspberries, rice, rutabagas (with or without tops) or rutabaga tops, soybean hay, spinach, squash, strawberries, summer squash, Swiss chard, tomatoes, turnips (with or without tops) or turnip greens, vetch, wheat, youngberries.

0.75 part per million in or on cottonseed.

0.2 part per million in or on sunflower seed.

0.1 part per million in or on soybeans.

§ 180.122 Chlordane; tolerances for residues.

A tolerance of 0.3 part per million is established for residues of the insecticide chlordane (1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-4,7-methanoindene, containing not more than 1 percent of the intermediate compound hexachlorocyclopentadiene) in or on each of the following raw agricultural commodities: Apples, apricots, beans, beets (with or without tops) or beet greens alone, black-

berries, blueberries (huckleberries), boysenberries, broccoli, brussels sprouts, cabbage, carrots, cauliflower, celery, cherries, citrus fruits, collards, corn, cucumbers, dewberries, eggplants, grapes, kale, kohlrabi, lettuce, loganberries, melons, nectarines, okra, onions, papayas, peaches, peanuts, pears, peas, peppers, pineapples, plums (fresh prunes), potatoes, quinces, radishes (with or without tops) or radish tops, raspberries, rutabagas (with or without tops) or rutabaga tops, squash, strawberries, summer squash, sweetpotatoes, tomatoes, turnips (with or without tops) or turnip greens, youngberries.

§ 180.123 Inorganic bromides resulting from fumigation with methyl bromide; tolerances for residues.

Tolerances for residues of inorganic bromides (calculated as Br) in or on raw agricultural commodities that have been fumigated with the antimicrobial agent and insecticide methyl bromide after harvest (with the exception of strawberries) are established as follows:

240 parts per million in or on popcorn.

200 parts per million in or on almonds, brazil nuts, bush nuts, butter-nuts, cashew nuts, chestnuts, cottonseed, filberts (hazelnuts), hickory nuts, peanuts, pecans, pistachio nuts, walnuts.

200 parts per million in or on soybeans from use in accordance with the Pesticides Tolerance Division of the EPA.

100 parts per million in or on copra.

100 parts per million in or on asparagus, cumin seed, and ginger root from use in accordance with the Plant Quarantine Program of the U.S. Department of Agriculture.

75 parts per million in or on potatoes, sweetpotatoes.

75 parts per million in or on avocados and coffee beans from use in accordance with the Plant Quarantine Program of the U.S. Department of Agriculture.

50 parts per million in or on alfalfa hay, barley, beans, beans (green), beans (lima), beans (snap), black-eyed peas, cipollini bulbs, cocoa beans, corn, garlic, grain sorghum (milo), oats, peas, rice, rye, sweet corn (determined on kernels plus cob with husk removed), wheat.

50 parts per million in or on cabbage from use in accordance with the Plant Quarantine Program of the U.S. Department of Agriculture.

50 parts per million in or on timothy hay from use in accordance with the Plant Pest Control Program of the U.S. Department of Agriculture.

30 parts per million in or on garden beets (roots), carrots, citrus citron, cucumbers, grapefruit, horseradish, Jerusalem-artichokes, kumquats, lemons, limes, okra, oranges, parsnips (roots), peppers, pimentos, radishes, rutabagas, salsify roots, strawberries (from use before harvest), sugar beets (roots), summer squash, tangerines, turnips (roots), yams.

20 parts per million in or on apricots, cantaloups, cherries, eggplants, grapes, honeydew melons, mangoes, muskmel-

ons, nectarines, onions, papayas, peaches, pineapples, plums (fresh prunes), pumpkins, tomatoes, watermelons, winter squash, zucchini squash.

5 parts per million in or on apples, pears, quinces.

§ 180.124 Glyodin; tolerances for residues.

Tolerances are established for residues of the fungicide glyodin (2-heptadecyl glyoxalidine acetate or 2-heptadecyl glyoxalidine (base)) in or on the raw agricultural commodities apples, cherries, peaches, and pears at 5 parts per million.

§ 180.125 Calcium cyanide; tolerances for residues.

Tolerances are established for residues of the insecticide calcium cyanide, calculated as hydrogen cyanide, in or on raw agricultural commodities as follows:

25 parts per million, from postharvest application, in or on the grains: Barley, buckwheat, corn, oats, rice, rye, sorghum, and wheat.

5 parts per million in or on cucumbers, lettuce, radishes, and tomatoes.

§ 180.126 Inorganic bromides resulting from soil treatment with ethylene dibromide; tolerances for residues.

Tolerances for residues of inorganic bromides (calculated as Br) in or on raw agricultural commodities grown in soil treated with the nematocide ethylene dibromide are established as follows:

75 parts per million in or on broccoli, carrots, melons, parsnips, potatoes.

50 parts per million in or on eggplant, okra, summer squash, sweet corn, sweet corn forage, sweetpotatoes, tomatoes.

40 parts per million in or on pineapple.

30 parts per million in or on cucumbers, lettuce, peppers.

25 parts per million in or on cottonseed, peanuts (see § 180.126a).

10 parts per million in or on asparagus, cauliflower.

5 parts per million in or on lima beans, strawberries.

§ 180.126a Inorganic bromide residues in peanut hay and peanut hulls; statement of policy.

(a) Investigations by the Food and Drug Administration show that peanut hay and peanut hulls have been used as feed for meat and dairy animals. While many growers now harvest peanuts with combines and leave the hay on the ground to be incorporated into the soil, some growers follow the practice of curing peanuts on the vines in a stack and save the hay for animal feed. Peanut shells or hulls have been used to a minor extent as roughage for cattle feed. It has been established that the feeding to cattle of peanut hay and peanut hulls containing residues of inorganic bromides will contribute considerable residues of inorganic bromides to the meat and milk.

(b) There are no tolerances for inorganic bromides in meat and milk to cover residues from use of such peanut hay and peanut hulls as animal feed. Peanut hay and peanut hulls containing

residues of inorganic bromides from the use of nematocides such as ethylene dibromide or 1,2-dibromo-3-chloropropane are unsuitable as an ingredient in the feed of meat and dairy animals and should not be represented, sold, or used for that purpose.

§ 180.127 Piperonyl butoxide; tolerances for residues.

Tolerances for residues of the insecticide piperonyl butoxide ((butyl carbonyl) (6-propyl piperonyl) ether) from postharvest use of such pesticide chemical are established in or on raw agricultural commodities, as follows:

20 parts per million in or on barley, birdseed mixtures, buckwheat, corn (including popcorn), rice, rye, wheat.

8 parts per million in or on almonds, apples, beans, blackberries, blueberries (huckleberries), boysenberries, cherries, cocoa beans, copra, cottonseed, crabapples, currants, dewberries, figs, flaxseed, gooseberries, grain sorghum, grapes, guavas, loganberries, mangoes, muskmelons, oats, oranges, peaches, peanuts (determined on the nuts with shell removed), pears, peas, pineapples, plums (fresh prunes), raspberries, tomatoes, walnuts.

0.25 part per million in or on potatoes from postharvest application.

§ 180.128 Pyrethrins; tolerances for residues.

Tolerances for residues of the insecticide pyrethrins (insecticidally active principles of *Chrysanthemum cinerariaefolium*) are established in or on raw agricultural commodities as follows:

From postharvest application: 3 parts per million in or on barley, birdseed mixtures, buckwheat, corn (including popcorn), rice, rye, and wheat.

From postharvest application: 1 part per million in or on almonds, apples, beans, blackberries, blueberries (huckleberries), boysenberries, cherries, cocoa beans, copra, cottonseed, crabapples, currants, dewberries, figs, flaxseed, gooseberries, grain sorghum, grapes, guavas, loganberries, mangoes, muskmelons, oats, oranges, peaches, peanuts (determined on the nuts with shell removed), pears, peas, pineapples, plums (fresh prunes), raspberries, tomatoes, and walnuts.

0.5 part per million in milk fat reflecting negligible residues in milk.

0.1 part per million (negligible residue) in meat, fat, and meat byproducts of cattle, goats, hogs, horses, and sheep.

0.05 part per million in or on potatoes from postharvest application.

§ 180.129 o-Phenylphenol and its sodium salt; tolerances for residues.

Tolerances are established for residues of the fungicides o-phenylphenol and sodium o-phenylphenate, each expressed as o-phenylphenol, from postharvest application of either, as follows:

125 parts per million in or on cantaloups, of which not more than 10 parts per million shall be in the edible portion.

25 parts per million in or on apples, pears.

20 parts per million in or on carrots, peaches, plums (fresh prunes).

15 parts per million in or on sweetpotatoes.

10 parts per million in or on citrus citron, cucumbers, grapefruit, kumquats, lemons, limes, oranges, peppers (bell), pineapples, tangerines, tomatoes.

5 parts per million in or on cherries, nectarines.

§ 180.130 Hydrogen cyanide; tolerances for residues.

Tolerances for residues of the insecticide hydrogen cyanide from postharvest fumigation are established as follows:

250 parts per million in or on the following spices: Allspice, anise, basil, bay, black pepper, caraway, cassia, celery seed, chili, cinnamon, cloves, coriander, cumin, dill, ginger, mace, marjoram, nutmeg, oregano, paprika, poppy, red pepper, rosemary, sage, savory, thyme, tumeric, white pepper.

75 parts per million in or on barley, buckwheat, corn (including popcorn), milo (grain sorghum), oats, rice, rye, wheat.

50 parts per million in or on citrus fruits.

25 parts per million in or on almonds, beans (dried), cashews, cocoa beans, peanuts, peas (dried), pecans, sesame, walnuts.

§ 180.131 Endrin; tolerances for residues.

A tolerance of zero is established for residues of the insecticide endrin in or on each of the following raw agricultural commodities: Broccoli, brussels sprouts, cabbage, cauliflower, cottonseed, cucumbers, eggplant, peppers, potatoes, sugarbeets, sugarbeet tops, summer squash, and tomatoes.

§ 180.132 Thiram; tolerances for residues.

Tolerances for residues of the fungicide thiram (tetramethyl thiuram disulfide) in or on raw agricultural commodities are established as follows:

7 parts per million in or on apples, celery, peaches, strawberries, tomatoes.

7 parts per million in or on bananas (from preharvest and postharvest application) of which not more than 1 part per million shall be in the pulp after peel is removed and discarded.

§ 180.133 Lindane; tolerances for residues.

Tolerances are established for residues of the insecticide lindane (gamma isomer of benzene hexachloride) in or on raw agricultural commodities as follows:

7 parts per million in or on the fat of meat from cattle, goats, horses, and sheep.

4 parts per million in or on the fat of meat from hogs.

3 parts per million in or on cucumbers, lettuce, melons, mushrooms, pumpkins, squash, summer squash, and tomatoes.

1 part per million in or on apples, apricots, asparagus, avocados, broccoli, brussels sprouts, cabbage, cauliflower, celery, cherries, collards, eggplants, grapes, guavas, kale, kohlrabi, mangoes,

mustard greens, nectarines, okra, onions (dry bulb only), peaches, pears, peppers, pineapples, plums (fresh prunes), quinces, spinach, strawberries, and Swiss chard.

§ 180.134 Oxex; tolerances for residues.

Tolerances for residues of the insecticide oxex (p-chlorophenyl-p-chlorobenzenesulfonate) are established as follows:

5 parts per million in or on grapefruit, lemons, oranges, tangerines.

3 parts per million in or on apples, peaches, pears, plums (fresh prunes).

§ 180.135 Aldrin; tolerances for residues.

Tolerances for total residues of the insecticide aldrin and its epoxidation product dieldrin, resulting from application of aldrin, in or on raw agricultural commodities are established as follows:

0.1 part per million in or on asparagus, broccoli, brussels sprouts, cabbage, cantaloups, cauliflower, celery, cherries, cranberries, cucumbers, eggplant, grapes, lettuce, mangoes, muskmelons, nectarines, peaches, peppers, pimientos, pineapple, plums (fresh prunes), potatoes, pumpkins, strawberries, summer squash, sweet potatoes, tomatoes, watermelons, winter squash.

Zero in or on alfalfa, apples, apricots, beans, black-eyed peas, carrots, clover, collards, corn forage, corn grain, cowpeas, cowpea hay, endive (escarole), garden beets, garden beet tops, garlic, grain sorghum, grain sorghum forage, horse radish, kale, kohlrabi, leeks, lespedeza, mustard greens, onions, parsnips, peanuts, peanut hay, pears, peas, pea hay, popcorn, quinces, radishes, rutabagas, salsify tops, salsify roots, shallots, soybeans, soybean hay, spinach, sugarbeets, sugarbeet tops, Swiss chard, turnips, turnip tops.

Additional tolerances for total residues of aldrin are established, on an interim basis pending reevaluation of all tolerances for this insecticide when new toxicity and related data become available on or before June 30, 1968, at 0.1 part per million in or on straws of barley, oats, rice, rye, and wheat; at 0.05 part per million in or on grapefruit, lemons, limes, oranges, rice grain, and tangerines; at 0.02 part per million in or on the grains of barley, oats, rye, and wheat.

§ 180.136 Basic copper carbonate; tolerance for residues.

The tolerance for residues of the fungicide basic copper carbonate in or on pears from post-harvest use of the chemical is 3 parts per million of combined copper.

§ 180.137 Dieldrin; tolerances for residues.

Tolerances for residues of the insecticide dieldrin in or on raw agricultural commodities are established as follows:

0.1 part per million in or on apples, apricots, asparagus, bananas, broccoli, brussels sprouts, cabbage, carrots, cauliflower, cherries, cranberries, cucumbers, eggplant, grapes, horse radish, lettuce,

mangoes, nectarines, onions, parsnips, peaches, pears, peppers, pimentos, plums (fresh prunes), potatoes, quinces, radishes, radish tops, salsify roots, strawberries, summer squash, sweet potatoes, tomatoes.

Zero in or on alfalfa, beans, black-eyed peas, clover, collards, corn grain, corn forage, cowpeas, cowpea hay, endive (escarole), garden beets, garden beet tops, grain sorghum, grain sorghum forage, kale, kohlrabi, lespedeza, mustard greens, peas, pea hay, popcorn, rutabagas, salsify tops, spinach, soybeans, soybean hay, Swiss chard, turnips, turnip tops.

Additional tolerances for residue of dieldrin are established, on an interim basis pending reevaluation of all tolerances for this insecticide when new toxicity and related data become available on or before June 30, 1968, at 0.1 part per million in or on the straws of barley, oats, rye, and wheat; at 0.05 part per million in or on grapefruit, lemons, limes, oranges, and tangerines; at 0.02 part per million in or on the grains of barley, oats, rye, and wheat.

§ 180.133 Toxaphene; tolerances for residues.

Tolerances are established for residues of the insecticide toxaphene (chlorinated camphene containing 67 percent-69 percent chlorine) in or on raw agricultural commodities as follows:

* 7 parts per million in or on apples, apricots, beans, blackberries, boysenberries, broccoli, brussels sprouts, cabbage, carrots, cauliflower, celery, citrus fruits, collards, corn, cranberries, cucumbers, dewberries, eggplants; fat of meat from cattle, goats, hogs, horses, and sheep; hazelnuts, hickory nuts, horse-radish, kale, kohlrabi, lettuce, loganberries, nectarines, okra, onions, parsnips, peaches, peanuts, pears, peas, pecans, peppers, pimentos, quinces, radishes (with or without tops) or radish tops, raspberries, rutabagas, spinach, strawberries, tomatoes, walnuts, youngberries.

5 parts per million in or on barley, oats, rice, rye, sorghum grain, wheat.

5 parts per million, calculated as a chlorinated terpene of molecular weight 396.6 containing 67 percent chlorine, in or on cottonseed.

3.5 parts per million combined residues of DDT and toxaphene in or on soybeans (dry form), of which residues DDT shall not exceed 1.5 parts per million and toxaphene shall not exceed 2 parts per million.

3 parts per million in or on bananas (of which residue not more than 0.3 part per million shall be in the pulp after the peel is removed and discarded), pineapples.

2 parts per million in or on soybeans (dry form).

§ 180.139 1,1-Dichloro-2,2-bis(p-ethylphenyl) ethane; tolerances for residues.

Tolerances are established for residues of the insecticide 1,1-dichloro-2,2-bis

(p-ethylphenyl) ethane in or on raw agricultural commodities as follows:

15 parts per million in or on apples, broccoli, brussels sprouts, cabbage, cauliflower, cherries, kohlrabi, lettuce, pears, spinach.

Zero in meat and milk.

§ 180.140 BHC; tolerances for residues.

Tolerances are established for residues of the insecticide BHC (benzene hexachloride) in or on the raw agricultural commodities apples, apricots, asparagus, avocados, broccoli, brussels sprouts, cabbage, cauliflower, celery, cherries, collards, cucumbers, eggplants, grapes, kale, kohlrabi, lettuce, melons, mustard greens, nectarines, okra, onions (dry bulb only), peaches, pears, peppers, plums (fresh prunes), pumpkins, spinach, strawberries, squash, summer squash, Swiss chard, and tomatoes at 1 part per million.

§ 180.141 Biphenyl; tolerances for residues.

A tolerance of 110 parts per million for residues of the fungicide biphenyl (also known as diphenyl) from postharvest use is established in or on each of the following raw agricultural commodities: Citrus citron, grapefruit, kumquats, lemons, limes, oranges, tangerines, other citrus fruits and hybrids thereof.

§ 180.142 2,4-D; tolerances for residues.

(a) A tolerance of 5 parts per million is established for residues of the herbicide and plant regulator 2,4-D (2,4-dichlorophenoxyacetic acid) in or on each of the following raw agricultural commodities: Apples, citrus fruits, pears, quinces. The tolerance for citrus fruits also includes residues of 2,4-D (2,4-dichlorophenoxyacetic acid) from the preharvest application of 2,4-D isopropyl ester to citrus fruits and from the postharvest application of the 2,4-D isopropyl ester to lemons.

(b) Tolerances are established for residues of 2,4-D (2,4-dichlorophenoxyacetic acid) at 0.5 part per million in or on the grain of, and at 20 parts per million in or on the forage of barley, oats, rye, and wheat from application of 2,4-D in acid form, or in the form of one or more of the following salts or esters:

(1) The inorganic salts: Ammonium, lithium, potassium, and sodium.

(2) The amine salts: Alkanolamines (of the ethanol and isopropanol series), alkyl (C-12), alkyl (C-13), alkyl (C-14), alkylamines derived from tall oil, amylamine, diethanolamine, diethylamine, diisopropanolamine, dimethylamine, *N,N*-dimethylmethylamine, *N,N*-dimethyloleylamine, ethanolamine, ethylamine, heptylamine, isopropanolamine, isopropylamine, methylamine, morpholine, octylamine, *N*-oleyl-1,3-propylene diamine, propylamine, triethanolamine, and trimethylamine.

(3) The esters: Amyl (pentyl), butoxyethoxypropyl, butoxyethyl, butoxypropoxypropyl, butoxypropyl, butyl, dipropylene glycol isobutyl ether, ethoxyethoxyethyl, ethoxyethoxypropyl, ethyl,

ethylene glycol butyl ether, 2-ethylhexyl (isooctyl), 2-ethyl-4-methylpentyl (isooctyl), isobutyl, isopropyl, methyl, 2-octyl (isooctyl), polyethylene glycol 200, polypropoxybutyl, polypropylene glycol, propylene glycol, propylene glycol butyl ether, propylene glycol isobutyl ether, tetrahydrofurfuryl, and tripropylene glycol isobutyl ether.

§ 180.143 [Reserved]

§ 180.144 [Reserved]

§ 180.145 Fluorine compounds; tolerances for residues.*

A tolerance of 7 parts per million of combined fluorine is established for residues of the insecticidal fluorine compounds cryolite and synthetic cryolite (sodium aluminum fluoride) in or on each of the following raw agricultural commodities: Apples, apricots, beans, beets (with or without tops) or beet greens alone, blackberries, blueberries (huckleberries), boysenberries, broccoli, brussels sprouts, cabbage, carrots, cauliflower, citrus fruits, corn, collards, cranberries, cucumbers, dewberries, eggplants, grapes, kale, kohlrabi, lettuce, loganberries, melons, mustard greens, nectarines, okra, peaches, peanuts, pears, peas, peppers, plums (fresh prunes), pumpkins, quinces, radishes (with or without tops) or radish tops, raspberries, rutabagas (with or without tops) or rutabaga tops, squash, strawberries, summer squash, tomatoes, turnips (with or without tops) or turnip greens, youngberries.

§ 180.146 Inorganic bromides or total combined bromide resulting from fumigation with ethylene dibromide; tolerances for residues.

Tolerances of 50 parts per million are established for residues of inorganic bromides (calculated as Br) in or on the following grains that have been fumigated after harvest with ethylene dibromide: Barley, corn, oats, popcorn, rice, rye, sorghum (milo), wheat.

Tolerances of 10 parts per million are established for residues of inorganic bromides (calculated as Br) in or on the following raw agricultural commodities that have been fumigated after harvest with ethylene dibromide in accordance with the Mediterranean Fruit Fly Control Program or the Quarantine Program of the U.S. Department of Agriculture: Beans (string), bitter melons (*Mormodica charantia*), cantaloups, Cavendish bananas, citrus fruits, cucumbers, guavas, litchi fruit, litchi nuts, longan fruit, mangoes, papayas, peppers (bell), pineapples, and zucchini squash.

Tolerances of 25 parts per million are established for residues of total combined bromine (which include bromine from both inorganic and organic compounds, resulting from fumigation after harvest with ethylene dibromide in accordance with the Mediterranean Fruit Fly Control Program, the Quarantine Program

* Tolerances established are based upon data acquired at the public hearing held in 1950 and formerly appeared in § 180.101.

* See footnote 1 to § 180.115.

of the U.S. Department of Agriculture, or to meet the State quarantine requirements) in or on cherries, plums (fresh prunes).

§ 180.147 DDT; tolerances for residues.

Tolerances for residues of the insecticide DDT (a mixture of 1,1,1-trichloro-2,2-bis(p-chlorophenyl)ethane and 1,1,1-trichloro-2-(o-chlorophenyl)-2-(p-chlorophenyl)ethane) are established in or on raw agricultural commodities as follows:

50 parts per million in or on peppermint hay and spearmint hay, which are not to be used for feeding livestock.

20 parts per million in or on fresh hops. Any byproducts or refuse from such hops are not to be used for feeding livestock.

7 parts per million in or on apples, apricots, beans, beet greens, blueberries (huckleberries), cabbage, celery, collards, cranberries, cucumbers, eggplants; fat of meat from cattle, goats, hogs, horses, and sheep; grapes, kale, lettuce, mangoes, melons, mustard greens, nectarines, okra, onions, parsnip greens, peaches, pears, peas, peppers, pineapples, pumpkins, quinces, radish tops, rutabaga tops, spinach, squash, summer squash, sweetpotatoes (from postharvest use), Swiss chard, tomatoes, turnip greens.

4 parts per million in or on cottonseed.

3.5 parts per million in or on avocados, carrots, cherries, citrus fruits, the fresh vegetable sweet corn (determined on kernels plus cob after removing any husk present when marketed), papayas, plums (fresh prunes).

3.5 parts per million combined residues of DDT and toxaphene in or on soybeans (dry form), of which residues DDT shall not exceed 1.5 parts per million and toxaphene shall not exceed 2 parts per million.

1.5 parts per million in or on soybeans (dry form).

1 part per million in or on artichokes, asparagus, beets (roots), blackberries, boysenberries, broccoli, brussels sprouts, cauliflower, currants, dewberries, endive (escarole), gooseberries, guavas, kohlrabi, loganberries, mushrooms, parsnips (roots), peanuts, potatoes (determined after washing off any soil present when marketed), radishes (roots), raspberries, rutabagas (roots), strawberries, turnips (roots), youngberries.

§ 180.147a DDT residues in corn forage, corn fodder, corn silage, corn stover, and sweet corn cannery waste; statement of policy and interpretation.

(a) Section 180.101(e)(43) of this chapter, promulgated on March 11, 1955, permitted a tolerance of 7 parts per million for residues of DDT in or on the fresh vegetable sweet corn. Because of a showing of the unsuitability of the tolerance level based on sweet corn as marketed, § 180.147 provides a tolerance of 3.5 parts per million of DDT in or on the fresh vegetable sweet corn (determined on kernels plus cob after removing any husk present when marketed). Residue studies have indicated that the

application of DDT in any manner to the feed of dairy cows or to the dairy cows themselves results in residues of DDT in milk. No tolerance has been established to permit any residues of DDT in milk from feeding corn forage, corn fodder, corn silage, corn stover, or sweet corn cannery waste to dairy cows. When these items contain any amount of DDT, they are unsuitable as a feed for dairy cows and should not be represented, sold, or used for that purpose.

(b) A tolerance of 7 parts per million for residues of DDT in the fat of meat from cattle, goats, hogs, horses, and sheep has been established in § 180.147. Animals that consume corn forage, corn fodder, corn silage, corn stover, or sweet corn cannery waste containing DDT may accumulate considerably more of the chemical in their fat than is present in the feed itself, and a long time may be required on a diet free of DDT to reduce excessive levels of DDT to the tolerance level. Unless the person who raises meat animals is in a position to determine the magnitude of DDT residues in these corn feed products and to insure that the conditions of feeding are such that the residues in meat from such animals will be within the established tolerance, these products from DDT-treated corn should not be used in the feeding of meat animals.

(See also 21 CFR 121.226.)

§ 180.147b DDT residues in apple pomace.

(a) Investigations by the Food and Drug Administration show that apple pomace containing substantial amounts of DDT has been used as feed for dairy and meat animals. Section 409 of the act would render illegal any apple pomace for animal feeding that contains DDT in excess of the 7 parts per million fixed for apples by § 180.147. It has been established that the feeding of apple pomace containing DDT will contribute residues of DDT to the fat of meat animals and to milk of dairy animals.

(b) There is no tolerance for DDT in milk to provide for residues that may occur from feeding apple pomace which contains DDT to dairy animals. Apple pomace containing DDT should not be fed to dairy animals, since it has been established that the ingestion by them of even small amounts of DDT results in contamination of the milk with this pesticide. Apple pomace containing any amount of DDT is unsuitable as a feed or an ingredient of mixed feeds for dairy animals and should not be represented, sold, or used for that purpose.

(c) There is an established legal tolerance of 7 parts per million for residues of DDT in or on the fat of meat from cattle, goats, sheep, horses, and hogs (§ 180.147). Animals that consume DDT in feed may accumulate considerably more of the chemical in their fat than is present in the feed itself, and a long time may be required on a diet free of DDT to reduce excessive residues to the tolerance level. It has not been established under what conditions of feeding, if any, apple pomace containing less than

7 parts per million of DDT can be fed to animals without causing the meat from such animals to contain residues in excess of the tolerance. Therefore, unless a grower of meat animals is in a position to establish that the DDT residue in the apple pomace and the conditions of feeding are such that the meat from such animals will be within the established tolerance, apple pomace should not be used in the feeding of meat animals.

§ 180.147c DDT and its related degradation products in milk.

Tolerances of 0.05 part per million are established for residues in milk for each or any combination of the following: DDT, DDD (1,1-dichloro-2,2-bis(p-chlorophenyl)ethane), and DDE (1,1-dichloro-2,2-bis(p-chlorophenyl)ethylene). These tolerances are not established to provide for residues from the purposeful use of DDT, DDD, or DDE on dairy cattle, in dairy barns, or on the crops intended to be used for feeding dairy cattle.

§ 180.148 β -Naphthoxyacetic acid; tolerances for residues.

A tolerance of 0.05 part per million is established for negligible residues of the plant regulator β -naphthoxyacetic acid in or on the raw agricultural commodity pineapples from the application of the sodium salt of β -naphthoxyacetic acid to the growing crop.

§ 180.149 Mineral oil; tolerances for residues.

(a) For the purposes of this section, the insecticide mineral oil is defined as the refined petroleum fraction having the following characteristics:

- (1) Minimum flashpoint of 300° F.
- (2) Gravity of 27 to 34 by the American Petroleum Institute standard method.
- (3) Pour point of 30° F. maximum.
- (4) Color 2 maximum by standards of the American Society for Testing Materials.
- (5) Boiling point between 480° F. and 960° F.
- (6) Viscosity at 100° F. of 100 to 200 seconds Saybolt.

(7) Unsulfonated residue of 90 percent minimum.

(8) No sulfur compounds according to the United States Pharmacopeia test under Liquid Petrolatum.

(b) Tolerances of 200 parts per million for residues of mineral oil as specified in paragraph (a) of this section are established in or on the following grains from postharvest application: Shelled corn, grain sorghum.

§ 180.150 Dalapon sodium salt; tolerances for residues.

Tolerances for residues of the herbicide dalapon sodium salt calculated as dalapon (2,2-dichloropropionic acid), in or on raw agricultural commodities, are established as follows:

- 75 parts per million in or on flaxseed.
- 35 parts per million in or on cottonseed.
- 30 parts per million in or on asparagus.
- 15 parts per million in or on peaches, peas (shelled or unshelled), peavines (with or without pods).

10 parts per million in or on corn grain, dried ear corn (kernels and cobs), potatoes.

5 parts per million in or on bananas, corn fodder and forage, cranberries, fresh corn including sweet corn (kernels plus cobs with husks removed), grapefruit, limes, oranges, sugar beets (roots and tops), tangerines.

3 parts per million in or on apples, grapes, pears, pineapples.

2 parts per million in or on coffee.

1 part per million in or on apricots, plums.

0.1 part per million in or on sugarcane (negligible residue).

Zero in meat and milk.

§ 180.151 Ethylene oxide; tolerances for residues.

A tolerance of 50 parts per million is established for residues of the antimicrobial agent and insecticide ethylene oxide, when used as a postharvest fumigant in or on the following raw agricultural commodities: Black walnut meats, copra, whole spices.

§ 180.152 Sodium dimethyldithiocarbamate; tolerance for residues.

A tolerance of 25 parts per million is established for residues of the fungicide sodium dimethyldithiocarbamate, calculated as zinc ethylenedisulfidocarbamate, in or on melons.

§ 180.153 Tolerance for residues of *O,O*-diethyl *O*-(2-isopropyl-4-methyl-6-pyrimidinyl)phosphorothioate.

Tolerances for residues of the insecticides *O,O*-diethyl *O*-(2-isopropyl-4-methyl-6-pyrimidinyl)phosphorothioate in or on raw agricultural commodities are established as follows:

60 parts per million in or on grass, of which residue not more than 40 parts per million shall remain 24 hours after application.

40 parts per million in or on alfalfa (fresh), clover (fresh), corn forage, peanut forage, pineapple forage.

25 parts per million in or on bean forage, peavines.

10 parts per million in or on alfalfa hay, bean hay, clover hay, grass hay, peanut hulls and hay, peavine hay, sorghum forage, sugar beet tops.

3 parts per million in or on almond hulls.

1 part per million in or on olives.

0.75 part per million in or on apples, apricots, beans (snap), beet roots, beet tops, blackberries, blueberries, boysenberries, broccoli, brussels sprouts, cabbage, carrots, cauliflower, celery, cherries, citrus, collards, corn (kernels and cob with husks removed), cranberries, cucumbers, dewberries, endive (escarole), figs, grapes, hops, kale, lettuce, lima beans, loganberries, melons, nectarines, onions, parsley, parsnips, peaches, peanuts, pears, peas with pods (determined on peas after removing any shell present when marketed), peppers, pineapples, plums (fresh prunes), radishes, raspberries, sorghum grain, spinach, strawberries, sugar beet roots, sugarcane, summer squash, Swiss chard,

tomatoes, turnip roots, turnip tops, watercress, winter squash.

0.75 part per million in or on the fat, meat, and meat byproducts of cattle and sheep from preslaughter application.

0.2 part per million in or on bananas (of which not more than 0.1 part per million shall be present in the pulp after peel is removed).

0.1 part per million in or on potatoes, sweetpotatoes.

§ 180.154 *O,O*-Dimethyl *S*-[4-oxo-1,2,3-benzotriazin-3(4H)-ylmethyl] phosphorodithioate; tolerances for residues.

Tolerances for residues of the insecticide *O,O*-dimethyl *S*-[4-oxo-1,2,3-benzotriazin-3(4H)-ylmethyl] phosphorodithioate in or on raw agricultural commodities are established as follows:

10 parts per million in or on almond hulls.

5 parts per million in or on alfalfa hay, blueberries, clover hay, grapes.

2 parts per million in or on alfalfa, apples, apricots, artichokes, barley straw, blackberries, boysenberries, broccoli, brussels sprouts, cabbage, cauliflower, celery, cherries, citrus fruits, clover, crabapples, cranberries, cucumbers, loganberries, melons (honeydew melons, muskmelons, cantaloups, watermelons, and other melons), nectarines, oat straw, onions, peaches, pears, plums (fresh prunes), quinces, raspberries, rye straw, snap beans, spinach, strawberries, tomatoes (from pre- and post-harvest applications), and wheat straw.

0.5 part per million in or on cottonseed.

0.3 part per million in or on almonds, eggplants, peppers, sugarcane.

0.2 part per million in or on barley grain, oat grain, rye grain, wheat grain.

0.1 part per million in the fat, meat, and meat byproducts of cattle, goats, and sheep.

Zero in milk.

§ 180.155 α -Naphthaleneacetic acid; tolerances for residues.

Tolerances are established for residues of the plant regulator α -naphthaleneacetic acid in or on raw agricultural commodities as follows:

1 part per million in or on apples, pears, quinces.

0.05 part per million (negligible residue) in or on pineapples from the application of the sodium salt to the growing crop.

§ 180.156 Carbophenothion; tolerances for residues.

Tolerances for residues of the insecticide carbophenothion (*S*-(*p*-chlorophenylthiomethyl) *O,O*-diethyl phosphorodithioate) in or on raw agricultural commodities are established as follows:

10 parts per million in or on almond hulls.

5 parts per million in or on alfalfa (fresh), alfalfa (hay), bean straw, clover (fresh), clover (hay), corn forage, sorghum forage, sugarbeets (roots), sugarbeets (tops).

2 parts per million in or on grapefruit, lemons, limes, oranges, sorghum grain, tangerines.

0.8 part per million in or on apples; apricots; beans, snap (succulent form); beans, lima (succulent form); beets, garden (roots); beets, garden (tops); cantaloups; cherries; crabapples; cucumbers; eggplants; figs; grapes; nectarines; olives; onions (dry bulb); onions (green); peaches; pears; peas (succulent form); peppers; pimentos; plums (fresh prunes); quinces; soybeans (succulent form); spinach; strawberries; summer squash; tomatoes; watermelons.

0.2 part per million in or on corn (kernels plus cob with husks removed), undelimited cottonseed.

0.1 part per million in the fat of meat of cattle, goats, hogs, and sheep.

Zero in milk.

§ 180.157 1-Methoxycarbonyl-1-propen-2-yl dimethylphosphate and its beta isomer; tolerances for residues.

Tolerances for residues of the insecticide 1-methoxycarbonyl-1-propen-2-yl dimethylphosphate and its beta isomer are established in or on raw agricultural commodities as follows:

1.0 part per million in or on alfalfa, artichokes, broccoli, brussels sprouts, cabbage, cauliflower, celery, cherries, clover, collards, corn forage, garden beets (including tops), kale, mustard greens, parsley, peaches, pea vines, plums, raspberries, sorghum forage, sorghum grain, spinach, strawberries, turnip tops.

0.5 part per million in or on apples, grapes, lettuce, melons (including cantaloups, honeydew melon and muskmelon, determined on the edible portion with rind removed), pears, watermelon.

0.25 part per million in or on beans, carrots, corn grain (including field corn, popcorn, sweet corn), cucumbers, eggplant, grapefruit, lemons, okra, onions (green), oranges, peas, peppers, potatoes, summer squash, tomatoes, turnips, walnuts (determined on the nut meats with shell removed).

§ 180.158 2,4-Dichloro-6-*o*-chloroanilino-*s*-triazine; tolerances for residues.

Tolerances for residues of the fungicide 2,4-dichloro-6-*o*-chloroanilino-*s*-triazine in or on raw agricultural commodities are established as follows:

10 parts per million in or on blackberries, blueberries (huckleberries), celery, cranberries, cucumbers, dewberries, green onions, loganberries, melons, pumpkins, raspberries, shallots, summer squash, strawberries, tomatoes, winter squash.

1 part per million in or on garlic, onions (dry bulb), potatoes.

§ 180.159 Sodium dehydroacetate; tolerances for residues.

Tolerances are established for residues of the fungicide sodium dehydroacetate, expressed as dehydroacetic acid, from postharvest application in or on raw agricultural commodities as follows:

65 parts per million in or on strawberries.

30 parts per million in or on bananas, of which residue not more than 10 parts per million shall be in the pulp after peel is removed and discarded.

§ 180.160 Mercaptobenzothiazole; tolerance for residues.

A tolerance of 0.1 part per million is established for residues of the fungicide mercaptobenzothiazole calculated as 2,2'-dithiobenzothiazole in or on apples.

§ 180.161 Manganous dimethyldithiocarbamate; tolerance for residues.

A tolerance of 7 parts per million is established for residues of the fungicide manganous dimethyldithiocarbamate, calculated as zinc ethylenebis(dithiocarbamate), in or on apples.

§ 180.162 Tetraiodoethylene; tolerance for residues.

A tolerance of 15 parts per million is established for residues of the fungicide tetraiodoethylene in or on cantaloups from postharvest application.

§ 180.163 1,1-Bis(*p*-chlorophenyl)-2,2,2-trichloroethanol; tolerances for residues.

Tolerances for residues of the insecticide 1,1-bis(*p*-chlorophenyl)-2,2,2-trichloroethanol in or on raw agricultural commodities are established as follows:

30 parts per million in or on hops.
25 parts per million in or on peppermint hay and spearmint hay.

10 parts per million in or on apricots, grapefruit, kumquats, lemons, limes, nectarines, oranges, peaches, tangerines.

5 parts per million in or on apples, beans (dry form); beans, snap (succulent form); beans, lima (succulent form); blackberries, boysenberries, bush-nuts, butternuts, cantaloups, cherries, chestnuts, crabapples, cucumbers, dewberries, eggplants, figs, filberts, grapes, hazelnuts, hickory nuts, loganberries, melons, muskmelons, pears, pecans, peppers, pimentos, plums (fresh prunes), pumpkins, quinces, raspberries, summer squash, strawberries, tomatoes, walnuts, watermelons, winter squash.

0.1 part per million in or on cottonseed.

§ 180.164 Terpene polychlorinates; tolerance for residues.

A tolerance of 5 parts per million is established for residues of the insecticide terpene polychlorinates (chlorinated mixture of camphene, pinene, and related terpenes, containing 65-68 percent chlorine), calculated as a chlorinated terpene of molecular weight 396.6 containing 67 percent chlorine, in or on cottonseed.

§ 180.165 2,4-D sodium salt; tolerance for residues.

A tolerance of 5 parts per million is established for residues of the herbicide 2,4-D sodium salt, calculated as 2,4-D (2,4-dichlorophenoxyacetic acid), in or on asparagus.

§ 180.166 Schradan; tolerance for residues.

A tolerance of 0.75 part per million is established for residues of the insecticide

schradan (octamethylpyrophosphoramide) in or on English walnuts.

§ 180.167 Nicotine-containing compounds; tolerances for residues.*

A tolerance of 2 parts per million of nicotine is established for residues of nicotine-containing compounds used as insecticides in or on the following raw agricultural commodities: Apples, apricots, artichokes, asparagus, avocados, beans, beets (with or without tops) or beet greens alone, blackberries, boysenberries, broccoli, brussels sprouts, cabbage, cauliflower, celery, cherries, citrus fruits, collards, corn, cranberries, cucumbers, currants, dewberries, eggplants, gooseberries, grapes, kale, kohlrabi, lettuce, loganberries, melons, mushrooms, mustard greens, nectarines, okra, onions, parsley, parsnips (with or without tops) or parsnip greens alone, peaches, pears, peas, peppers, plums (fresh prunes), pumpkins, quinces, radishes (with or without tops) or radish tops, raspberries, rutabagas (with or without tops) or rutabaga tops, spinach, squash, strawberries, summer squash, Swiss chard, tomatoes, turnips (with or without tops) or turnip greens, youngberries.

§ 180.168 Chlorbenseide; tolerances for residues.

A tolerance of 3.0 parts per million is established for residues of the insecticide chlorbenseide (*p*-chlorobenzyl *p*-chlorophenyl sulfide), including its sulfoxide and sulfone oxidation products, calculated as *p*-chlorobenzyl *p*-chlorophenyl sulfide, in or on each of the following raw agricultural commodities: Apples, crabapples, eggplants, nectarines, peaches, pears, plums (fresh prunes), quinces.

§ 180.169 Carbaryl; tolerances for residues.

Tolerances are established for residues of the insecticide carbaryl (1-naphthyl *N*-methylcarbamate), including its hydrolysis product 1-naphthol, calculated as 1-naphthyl *N*-methylcarbamate, in or on raw agricultural commodities, as follows:

100 parts per million in or on alfalfa, alfalfa hay, barley (green fodder and straw), bean forage, bean hay, clover, clover hay, corn fodder, corn forage, cotton forage, cowpea forage, cowpea hay, grass, grass hay, oats (green fodder and straw), peanut hay, peavines, rice straw, rye (green fodder and straw), sorghum forage, soybean forage, soybean hay, sugarbeet tops, wheat (green fodder and straw).

40 parts per million in or on almond hulls.

12 parts per million in or on blackberries, boysenberries, collards, dandelions, dewberries, garden beets (tops), kale, loganberries, mustard greens, parsley, raspberries, spinach, Swiss chard, turnips (tops).

10 parts per million in or on whole almonds (meat plus shell) and whole walnuts (meat plus shell) of which not more than 1 part per million shall be in

* See footnote 2 § 180.145.

or on the nut meats after shell is removed and discarded.

10 parts per million in or on apples, apricots, asparagus, bananas, beans, blueberries, broccoli, brussels sprouts, cabbage, carrots, cauliflower, cherries, Chinese cabbage, citrus fruits, cranberries, cucumbers, eggplants, endive (escarole), grapes, kohlrabi, lettuce, melons, nectarines, okra, olives, peaches, pears, peas (with pods), peppers, plums (fresh prunes), pumpkins, salsify (tops), sorghum grain, strawberries, summer squash, tomatoes, winter squash.

5 parts per million in or on corn (kernels and kernels plus cob, determined after removing husks present when marketed), cottonseed, cowpeas, garden beets (roots), horseradish, meat and fat of poultry, parsnips, peanuts, radishes, rice, rutabagas, salsify (roots) soybeans, turnips (roots).

5 parts per million in or on filberts (hazelnuts) of which not more than 1 part per million shall be in or on the nuts after shell is removed and discarded.

Zero in eggs and the following grains: Barley, oats, rye, wheat.

§ 180.171 Dioxathion; tolerances for residues.

Tolerances for residues of dioxathion (2,3-*p*-dioxanedithiol-*S,S*-bis (O,O-diethylphosphorodithioate)) in or on raw agricultural commodities incurred from the use of the insecticide composed of a mixture of approximately 70 percent of the *cis* and *trans* isomers of 2,3-*p*-dioxanedithiol-*S,S*-bis (O,O-diethylphosphorodithioate) and approximately 30 percent of related compounds are established as follows:

4.9 parts per million in or on apples, pears, quinces.

2.8 parts per million in or on grapefruit, lemons, limes, oranges, tangerines.

2.1 parts per million in or on grapes.

1 part per million in or on fat of meat from cattle, goats, hogs, horses, and sheep.

0.14 part per million (negligible residue) in or on stone fruits and walnuts.

Zero in milk.

§ 180.172 Dodine; tolerances for residues.

Tolerances for residues of the fungicide dodine (*n*-dodecylguanidine acetate) in or on raw agricultural commodities are established as follows:

5 parts per million in or on apples, cherries (sour and sweet), peaches, pears, strawberries.

0.3 part per million in or on black walnuts and pecans.

Zero in meat and milk.

§ 180.173 Ethion; tolerances for residues.

Tolerances are established for total residues of the insecticide ethion (O,O,O',O'-tetraethyl *S,S'*-methylene bisphosphorodithioate) including its oxygen analog (*S*-[[diethoxyphosphinothioyl)

thio]methyl]O,O-diethyl phosphorothioate) in or on raw agricultural commodities as follows:

5 parts per million in or on almond hulls.

2.5 parts per million in or on fat of cattle.

2 parts per million in or on apples, beans, citrus fruits, grapes, melons, plums (fresh prunes), sorghum grain, sorghum forage, strawberries, tomatoes.

1 part per million in or on eggplants, nectarines, onions, peaches, pears, peppers, pimentos.

0.75 part per million in or on meat and meat byproducts of cattle.

0.5 part per million in or on cucumbers, summer squash.

0.1 part per million in or on almonds, apricots, cherries, chestnuts, filberts, pecans, and walnuts.

Zero in milk.

§ 180.174 Tetradifon; tolerances for residues.

Tolerances are established for residues of the insecticide tetradifon (2,4,5,4'-tetrachlorodiphenyl sulfone) in or on raw agricultural commodities as follows: 100 parts per million in or on peppermint, spearmint.

30 parts per million in or on fresh hops.

6 parts per million in or on figs.

5 parts per million in or on apples, apricots, cherries, crabapples, grapes, nectarines, peaches, pears, plums (fresh prunes), quinces, strawberries.

2 parts per million in or on citrus citron, grapefruit, lemons, limes, oranges, tangerines.

1 part per million in or on cucumbers, melons, pumpkins, tomatoes, winter squash.

Zero in meat and milk.

§ 180.175 Maleic hydrazide; tolerances for residues.

Tolerances for residues of the herbicide and plant regulator maleic hydrazide (1,2-dihydro-3,6-pyridazinedione) in or on raw agricultural commodities are established as follows:

50 parts per million in or on potatoes.

15 parts per million in or on onions (dry bulb).

§ 180.176 Coordination product of zinc ion and maneb; tolerances for residues.

Tolerances for residues of a fungicide which is a coordination product of zinc ion and maneb (manganous ethylenebis(dithiocarbamate) containing 20 percent manganese, 2.5 percent zinc, and 77.5 percent ethylenebis(dithiocarbamate) (the whole product calculated as zinc ethylenebis(dithiocarbamate)), are established as follows:

65 parts per million in or on peanut vine hay, sugarbeet tops.

25 parts per million in or on the straws of barley, oats, rye, wheat.

15 parts per million in or on bananas from both preharvest and post-harvest use, of which not more than two parts per million shall be in the pulp after peel is removed and discarded.

15 parts per million in or on fodder or forage of field corn, sweet corn, and popcorn.

10 parts per million in or on apples, celery, crabapples, fennel, pears, quinces.

10 parts per million in or on the whole fruit of papayas, with no residue present in the edible pulp after the peel is removed and discarded.

7 parts per million in or on cranberries, cucumbers, grapes, summer squash, tomatoes.

7 parts per million in or on melons, with no residue present in the edible portion after the peel is removed and discarded.

5 parts per million in or on the grains of barley, oats, rye, wheat.

2 parts per million in or on carrots, sugar beets.

0.5 part per million in or on corn grain (including popcorn), fresh corn including sweet corn (kernels plus cob with husks removed), cottonseed, kidney, liver, onions (dry bulb), and peanuts.

0.1 part per million (negligible residue) in or on asparagus.

§ 180.177 Ronnel; tolerances for residues.

Tolerances for residues of the insecticide ronnel (O,O-dimethyl O-(2,4,5-trichlorophenyl) phosphorothioate), including its 2,4,5-trichlorophenol containing metabolites, in or on raw agricultural commodities are established as follows:

10 parts per million in fat of cattle, goats, and sheep.

4 parts per million in meat and meat byproducts of cattle, goats, and sheep.

3 parts per million in fat of hogs.

2 parts per million in meat and meat byproducts of hogs.

1.25 part per million in milk fat (reflecting negligible residues in whole milk).

0.5 part per million on bananas (of which residue, zero shall be in the pulp after peel is removed and discarded).

0.03 part per million in eggs.

0.01 part per million in meat, fat, and meat byproducts of poultry. (See also 21 CFR 121.209).

§ 180.178 Ethoxyquin; tolerances for residues.

A tolerance of 3 parts per million is established for residues of the plant regulator ethoxyquin (1,2-dihydro-6-ethoxy-2,2,4-trimethylquinoline) from preharvest or postharvest use in or on apples and pears.

(See also 21 CFR 121.201, 121.202, and 121.1001.)

§ 180.179 Tartar emetic; tolerances for residues.²

A tolerance of 3.5 parts per million is established for residues of the insecticide tartar emetic, calculated as combined antimony trioxide, in or on each of the following raw agricultural commodities: Citrus fruit, grapes, onions.

§ 180.180 Orthoarsenic acid.

A tolerance of 4 parts per million of combined As₂O₃ is established for residues

of the defoliant orthoarsenic acid in or on the raw agricultural commodity cottonseed.

§ 180.181 CIPC; tolerance for residues.

A tolerance of 50 parts per million is established for residues of the plant regulator CIPC (isopropyl N(3-chlorophenyl) carbamate) in or on potatoes from postharvest application.

§ 180.182 Endosulfan; tolerances for residues.

Tolerances are established for the total residues of the insecticide endosulfan (6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepin-3-oxide) and its metabolite endosulfan sulfate (6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-6,9-methano-2,4,3-benzodioxathiepin-3,3-dioxide) in or on raw agricultural commodities as follows:

2 parts per million in or on apples, apricots, artichokes, beans, broccoli, brussels sprouts, cabbage, cauliflower, celery, cherries, collards, cucumbers, eggplants, grapes, kale, lettuce, melons, mustard greens, nectarines, peaches, pears, peas (succulent type), peppers, pineapples, plums, prunes, pumpkins, spinach, strawberries, summer squash, sunflower seed, tomatoes, turnip greens, watercress, and winter squash.

1 part per million in or on alfalfa hay and cottonseed.

0.5 part per million in milk fat (reflecting negligible residues in milk) and in or on sugarcane.

0.3 part per million in or on alfalfa (fresh).

0.2 part per million in or on carrots, sweet corn (kernels plus cob with husks removed), sweetpotatoes; and in meat, fat, and meat byproducts of cattle, goats, hogs, horses, and sheep.

0.2 part per million (negligible residues) in or on filberts, macadamia nuts, pecans, potatoes, safflower seed, and walnuts.

§ 180.183 O,O-Diethyl S-[2-(ethylthio)ethyl] phosphorodithioate; tolerances for residues.

Tolerances for residues of the insecticide O,O-diethyl S-[2-(ethylthio)ethyl] phosphorodithioate and its cholinesterase-inhibiting metabolites, calculated as demeton, in or on raw agricultural commodities are established as follows:

12 parts per million in or on alfalfa hay, clover hay.

5 parts per million in or on alfalfa (fresh), barley (green fodder and straw), bean vines, clover (fresh), corn fodder and forage (including field corn, sweet corn, and popcorn), oats (green fodder and straw), peanut hay, pea vines, pineapple foliage, rice straw, sorghum fodder and forage, wheat (green fodder and straw).

2 parts per million in or on sugar beet tops.

0.75 part per million in or on barley grain, beans (dry), beans (lima), beans (snap), broccoli, brussels sprouts, cab-

² See footnote 2 to § 180.145.

bage, cauliflower, cottonseed, lettuce, oat grain, peanuts, peas, pecans, pineapples, potatoes, rice, sorghum grain, spinach, and tomatoes.

0.5 part per million in or on hops and sugarbeets.

0.3 part per million in or on coffee, corn grain including field corn, sweet corn (kernels plus cob with husk removed), and popcorn, sugarcane, wheat grain.

0.25 part per million in or on soybean forage and hay.

0.1 part per million in or on peppers and soybeans.

§ 180.184 Linuron; tolerances for residues.

Tolerances for residues of the herbicide linuron (3-(3,4-dichlorophenyl)-1-methoxy-1-methylurea) in or on raw agricultural commodities are established as follows:

1 part per million in or on carrots; corn fodder or forage from field corn, sweet corn, and popcorn; potatoes; sorghum fodder and forage; soybeans (dry or succulent); soybean forage and hay; meat, fat, and meat byproducts of cattle, goats, hogs, horses, and sheep.

0.5 part per million in or on parsnips (with or without tops) and parsnip tops; the forage, hay, and straw of barley, oats, rye, and wheat.

0.25 part per million in or on corn in grain or ear form from field corn, sweet corn, and popcorn, cottonseed, the grain of barley, oats, rye, sorghum (milo), and wheat.

§ 180.185 Dimethyl 2,3,5,6-tetrachloroterephthalate; tolerances for residues.

Tolerances for total residues of the herbicide dimethyl 2,3,5,6-tetrachloroterephthalate and its metabolites monomethyl 2,3,5,6-tetrachloroterephthalate and 2,3,5,6-tetrachloroterephthalic acid (calculated as dimethyl 2,3,5,6-tetrachloroterephthalate) are established as follows:

5 parts per million in or on mustard greens and turnip greens.

2 parts per million in or on collards, field beans (dry), kale, lettuce, mung beans (dry), peppers, pimentos, potatoes, snap beans (succulent), southern peas (black-eyed peas), soybeans, strawberries, sweetpotatoes, turnips, and yams.

1 part per million in or on broccoli, brussels sprouts, cabbage, cantaloups, cauliflower, cucumbers, eggplants, garlic, honeydew melons, onions, summer squash, tomatoes, watermelons, and winter squash.

0.4 part per million (negligible residue) in or on corn forage or fodder (including sweet corn, field corn, and popcorn).

0.2 part per million (negligible residue) in or on cottonseed.

0.05 part per million (negligible residue) in or on corn grain (including field corn and popcorn) and sweet corn (kernels plus cob with husk removed).

§ 180.186 Tributylphosphorotrithioate; tolerance for residues.

A tolerance of 0.25 part per million is established for residues of the defoliant

tributylphosphorotrithioate in or on cottonseed.

§ 180.187 TDE (or DDD); tolerances for residues.

Tolerances for residues of the insecticide TDE (1,1-dichloro-2,2-bis(p-chlorophenyl) ethane) are established in or on raw agricultural commodities as follows:

7 parts per million in or on apples, apricots, beans, blueberries (huckleberries), cucumbers, eggplants, grapes, melons, nectarines, peaches, pears, peppers, pumpkins, quinces, rutabaga tops, squash, summer squash, tomatoes, and turnip greens.

3.5 parts per million in or on blackberries, boysenberries, cherries, citrus fruits, dewberries, loganberries, plums (fresh prunes), raspberries, strawberries, sweet corn (kernels plus cob with husks removed).

1 part per million in or on broccoli, brussels sprouts, cabbage, carrots, cauliflower, kohlrabi, lettuce, peas, rutabagas (roots), spinach, and turnips (roots).

§ 180.188 Ammonium sulfamate; tolerances for residues.

A tolerance of 5 parts per million is established for residues of the herbicide ammonium sulfamate in or on apples and pears.

§ 180.189 Coumaphos; tolerances for residues.

Tolerances are established for residues of the insecticide coumaphos (O,O-diethyl O-3-chloro-4-methyl-2-oxo-2H-1-benzopyran-7-yl phosphorothioate) and its oxygen analog (O,O-diethyl O-3-chloro-4-methyl-2-oxo-2H-1-benzopyran-7-yl phosphate) in or on raw agricultural commodities as follows:

1 part per million in or on meat, fat, and meat byproducts of cattle, goats, hogs, horses, poultry, and sheep.

0.5 part per million in milk-fat reflecting negligible residues in milk.

0.1 part per million in eggs.

(See also 21 CFR 121.304.)

§ 180.190 Diphenylamine; tolerances for residues.

Tolerances for residues of the fungicide diphenylamine are established as follows:

10 parts per million in or on apples from preharvest or postharvest use, including use of impregnated wraps, for scald control.

Zero in milk and meat.

§ 180.191 Folpet; tolerances for residues.

Tolerances for residues of the fungicide folpet (N-(trichloromethylthio) phthalimide) in or on raw agricultural commodities are established as follows:

50 parts per million in or on celery, cherries, leeks, lettuce, onions (green), shallots.

25 parts per million in or on apples, avocados, blackberries, blueberries, boysenberries, crabapples, cranberries, currants, dewberries, gooseberries, grapes, huckleberries, loganberries, raspberries, strawberries, tomatoes.

15 parts per million in or on citrus fruits, cucumbers, garlic, melons, onions

(dry bulb), pumpkins, summer squash, winter squash.

§ 180.192 Calcium arsenate; tolerances for residues.²

A tolerance of 3.5 parts per million of combined As₂O₃ is established for residues of the insecticide calcium arsenate in or on each of the following raw agricultural commodities: Asparagus, beans, blackberries, blueberries (huckleberries), boysenberries, broccoli, brussels sprouts, cabbage, carrots, cauliflower,

² See footnote 2 § 180.145.

celery, collards, corn, cucumbers, dewberries, eggplants, kale, kohlrabi, loganberries, melons, peppers, pumpkins, raspberries, rutabagas (with or without tops) or rutabaga tops, spinach, squash, strawberries, summer squash, tomatoes, turnips (with or without tops) or turnip greens, youngberries.

§ 180.193 Copper arsenate; tolerances for residues.²

A tolerance of 3.5 parts per million of combined As₂O₃ is established for residues of the insecticide and fungicide copper arsenate in or on each of the following raw agricultural commodities: brussels sprouts, cabbage, cauliflower, kohlrabi, tomatoes.

§ 180.194 Lead arsenate; tolerances for residues.²

Tolerances for residues of lead arsenate (primarily an insecticide) in or on raw agricultural commodities are established as follows:

7 parts per million of combined lead in or on apples, apricots, asparagus, avocados, blackberries, blueberries (huckleberries), boysenberries, celery, cherries, cranberries, currants, dewberries, eggplants, gooseberries, grapes, loganberries, mangoes, nectarines, peaches, pears, peppers, plums (fresh prunes), quinces, raspberries, strawberries, tomatoes, youngberries.

1 part per million of combined lead in or on citrus fruits.

§ 180.195 Magnesium arsenate; tolerances for residues.²

A tolerance of 3.5 parts per million of combined As₂O₃ is established for residues of the insecticide magnesium arsenate in or on the raw agricultural commodity beans.

§ 180.196 Sodium arsenate; tolerance for residues.²

A tolerance of 3.5 parts per million of combined As₂O₃ is established for residues of the insecticide sodium arsenate in or on the raw agricultural commodity grapes.

§ 180.197 Inorganic bromides resulting from soil treatment with 1,2-dibromo-3-chloropropane; tolerances for residues.

Tolerances for residues of inorganic bromides (calculated as Br) in or on raw agricultural commodities grown in soil treated with the nematocide 1,2-

² See footnote 2 to § 180.145.

dibromo-3-chloropropane are established as follows:

130 parts per million in or on endive (escarole) and lettuce.

125 parts per million in or on bananas (of which residue not more than 75 parts per million shall be in the pulp after the peel is removed and discarded).

75 parts per million in or on almond hulls, carrots, celery, figs, okra, parsnips, radishes, snap beans, and turnips.

50 parts per million in or on almonds, broccoli, brussels sprouts, cabbage, cauliflower, eggplants, melons, peanuts,² peppers, pineapples, and tomatoes.

25 parts per million in or on blackberries, boysenberries, cottonseed, cucumbers, dewberries, grapes, loganberries, raspberries, and summer squash.

20 parts per million in or on citrus fruits.

15 parts per million in or on cherries and plums (fresh prunes).

10 parts per million in or on English walnuts and strawberries.

5 parts per million in or on apricots, nectarines, and peaches.

§ 180.198 *O,O*-Dimethyl 2,2,2-trichloro-1-hydroxyethyl phosphonate; tolerances for residues.

Tolerances are established for residues of the insecticide *O,O*-dimethyl 2,2,2-trichloro-1-hydroxyethyl phosphonate in or on raw agricultural commodities as follows:

45 parts per million in or on alfalfa (hay) and clover (hay).

12 parts per million in or on alfalfa (fresh), barley (green fodder and straw), clover (fresh), flax straw, oats (green fodder and straw), sugar beet tops, and wheat (green fodder and straw).

Four parts per million in or on peanut vine hay and hulls.

2 parts per million in or on bananas (of which not more than 0.2 part per million will be present in the pulp after the peel is removed).

1 part per million in or on bean vines and cowpea vines.

0.1 part per million (negligible residues) in or on artichokes, barley (grain), beans (dried), beets (garden), brussels sprouts, cabbage, carrots, cauliflower, collards, corn fodder and forage, corn (kernels plus cob with husk removed), cottonseed, cowpeas, flaxseed, lettuce, lima beans, meat, fat, and meat byproducts of cattle, oats (grain), peppers, pumpkins, safflower seed, snap beans, sugar beets, tomatoes, and wheat (grain).

0.01 part per million (negligible residue) in milk.

0.05 part per million (negligible residue) in or on peanuts.

² See § 180.126a for restrictions against use of peanut hay and peanut hulls for animal feed.

§ 180.199 Inorganic bromides resulting from soil treatment with combinations of chloropicrin, methyl bromide, and propargyl bromide; tolerances for residues.

Tolerances for residues of inorganic bromides (calculated as Br) in or on raw agricultural commodities grown in soil fumigated with combinations of chloropicrin, methyl bromide, and propargyl bromide are established as follows:

60 parts per million in or on eggplants.

40 parts per million in or on muskmelons, tomatoes.

25 parts per million in or on broccoli, cauliflower, peppers, pineapples, strawberries.

No tolerances are established for chloropicrin since it has been established that no residue of this substance remains in the raw agricultural commodity.

§ 180.200 2,6-Dichloro-4-nitroaniline; tolerances for residues.

Tolerances for residues of the fungicide 2,6-dichloro-4-nitroaniline are established as follows:

20 parts per million in or on apricots, nectarines (from preharvest and postharvest application), peaches (from preharvest and postharvest application), sweet cherries (from preharvest and postharvest application), snap beans.

15 parts per million in or on blackberries, boysenberries, celery, raspberries, strawberries.

10 parts per million in or on carrots (from postharvest application), grapes, lettuce, rhubarb, sweetpotatoes (from postharvest application).

5 parts per million in or on cucumbers, garlic, onions, tomatoes.

1 part per million in or on plums (fresh prunes).

0.1 part per million in or on cottonseed.

0.25 part per million in or on potatoes.

Unless otherwise specified, the tolerances prescribed in this section provide for residues from preharvest application only.

§ 180.201 Chlorosulfamic acid; tolerances for residues.

A tolerance of 8 parts per million is established for residues of sulfamate ion, expressed as sulfamic acid, from the postharvest application of the fungicide chlorosulfamic acid in or on asparagus, carrots, cauliflower, celery, potatoes, and radishes.

§ 180.202 *p*-Chlorophenoxyacetic acid; tolerances for residues.

A tolerance of 2 parts per million is established for residues of *p*-chlorophenoxyacetic acid in or on mung bean sprouts, from use as a plant regulator on the beans to inhibit embryonic root development.

§ 180.203 2,3,5,6-Tetrachloronitrobenzene; tolerances for residues.

A tolerance of 25 parts per million is established for residues of the plant regulator 2,3,5,6-tetrachloronitrobenzene in or on potatoes from postharvest application.

§ 180.204 Dimethoate including its oxygen analog; tolerances for residues.

Tolerances for total residues of the insecticide dimethoate (*O,O*-dimethyl *S*-(*N*-methylcarbamoylmethyl) phosphorodithioate) including its oxygen analog (*O,O*-dimethyl *S*-(*N*-methylcarbamoylmethyl) phosphorothioate) in or on raw agricultural commodities are established as follows:

2 parts per million in or on apples, beans (dry, lima, snap), broccoli, cabbage, cauliflower, collards, endive (escarole), grapefruit, kale, lemons, lettuce, mustard greens, oranges, pears, peas, peppers, spinach, Swiss chard, tangerines, tomatoes, turnips (roots and tops), and wheat (green fodder and straw).

1 part per million in or on melons.

0.2 part per million in or on potatoes.

0.1 part per million in or on cottonseed, pecans, and safflower seed.

0.04 part per million (negligible residue) in or on wheat grain.

0.02 part per million (negligible residue) in eggs and in meat, fat, and meat byproducts of cattle, goats, hogs, horses, poultry, and sheep.

0.002 part per million (negligible residue) in milk.

§ 180.205 Paraquat; tolerances for residues.

Tolerances are established for residues of the desiccant, defoliant, and herbicide paraquat (1,1'-dimethyl-4,4'-bipyridinium) derived from application of either the bis(methyl sulfate) or the dichloride salt, calculated in both instances as the cation, in or on raw agricultural commodities as follows:

0.5 part per million in or on almond hulls, cottonseed, potatoes, sugar beets, sugar beet tops.

0.05 part per million (negligible residue) in or on almonds, apples, apricots, avocados, bananas, cherries, citrus, coffee beans, corn (fresh vegetable), corn fodder and forage, corn grain, figs, filberts, grapes, lettuce, macadamia nuts, melons, nectarines, olives, papaya, peaches, pears, peppers, plums (fresh prunes), sorghum forage, sorghum grain, soybeans, soybean forage, tomatoes, walnuts.

§ 180.206 Phorate; tolerances for residues.

Tolerances are established for residues of the insecticide phorate (*O,O*-diethyl *S*-ethylthio) methyl phosphorodithioate), and its cholinesterase-inhibiting metabolites, in or on raw agricultural commodities as follows:

3 parts per million in or on sugar beet tops.

1.5 parts per million in or on wheat (green fodder).

1 part per million in or on alfalfa hay.

0.5 part per million in or on alfalfa (fresh), bean vines, corn forage, hops, and potatoes.

0.3 part per million in or on peanut vines and hay and sugar beet roots.

0.1 part per million in or on barley grain, barley straw, beans, corn grain,

sweet corn (kernels plus cob with husk removed), lettuce, peanuts, rice sorghum grain, sorghum fodder, sugarcane, and tomatoes.

0.05 part per million in or on cottonseed, wheat grain and wheat straw

0.02 part per million (negligible residue) in milk.

§ 180.207 Trifluralin; tolerances for residues.

Tolerances for residues of the herbicide and plant regulator trifluralin (*α,α,α*-trifluoro-2,6-dinitro-*N,N*-diisopropyl-*p*-toluidine) in or on raw agricultural commodities are established as follows:

2 parts per million in or on mung bean sprouts.

1 part per million in or on carrots.
0.2 part per million (negligible residue) in or on alfalfa hay.

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

§ 180.208 *N*-Butyl-*N*-ethyl-*α,α,α*-trifluoro-2,6-dinitro-*p*-toluidine; tolerances for residues.

Tolerances are established for negligible residues of the herbicide *N*-butyl-*N*-ethyl-*α,α,α*-trifluoro-2,6-dinitro-*p*-toluidine in or on the raw agricultural commodities alfalfa, birdsfoot trefoil, clover, lettuce, and peanuts at 0.05 part per million.

§ 180.209 Terbacil; tolerances for residues.

A tolerance of 0.1 part per million is established for residues of the herbicide terbacil (3-*tert*-butyl-5-chloro-6-methyluracil) in or on apples, citrus fruits, peaches, pears, peppermint hay, spearmint hay, and sugarcane.

§ 180.210 Bromacil; tolerances for residues.

A tolerance of 0.1 part per million is established for residues of the herbicide bromacil (5-bromo-3-*sec*-butyl-6-methyluracil) in or on citrus fruits and pineapples.

§ 180.211 2-chloro-*N*-isopropylacetanilide; tolerances for residues.

Tolerances for residues of the herbicide 2-chloro-*N*-isopropylacetanilide and its metabolites (calculated as 2-chloro-*N*-isopropylacetanilide) in or on raw agricultural commodities are established as follows:

3 parts per million in or on sorghum forage.

1.5 parts per million in or on corn forage and pea forage.

1 part per million in or on sugarbeet tops.

0.25 part per million in or on sorghum grain.

0.2 part per million in or on peas with pods (determined on peas after remov-

ing any pod present when marketed) and sugar beet roots.

0.1 part per million (negligible residue) in or on corn grain, cottonseed, sweet corn (kernels plus cobs with husks removed).

0.02 part per million (negligible residue) in eggs; milk; meat, fat, and meat byproducts of cattle, goats, hogs, horses, poultry, and sheep.

§ 180.212 *S*-Ethyl cyclohexylethylthiocarbamate; tolerances for residues.

Tolerances are established for residues of the herbicide *S*-ethyl cyclohexylethylthiocarbamate in or on the raw agricultural commodities garden beets (roots and tops), spinach, and sugar beets (roots and tops) at 0.05 part per million (negligible residue).

§ 180.213 Simazine; tolerances for residues.

Tolerances for residues of the herbicide simazine (2-chloro-4,6-bis(ethylamino)-*s*-triazine) in or on raw agricultural commodities are established as follows:

15 parts per million in or on alfalfa, Bermuda grass, grass.

10 parts per million in or on asparagus.
0.5 part per million in or on artichokes.

0.25 part per million in or on almonds (hulls and nuts), apples, avocados, blackberries, blueberries, boysenberries, cherries, fresh corn including sweet corn (kernels plus cobs with husks removed), corn grain (including popcorn), corn forage or fodder (including field corn, sweet corn, and popcorn), cranberries, currants, dewberries, filberts, grapefruit, grapes, lemons, loganberries, macadamia nuts, olives, oranges, peaches, pears, plums, raspberries, strawberries, and walnuts.

0.02 part per million (negligible residue) in eggs; milk; meat, fat, and meat byproducts of cattle, goats, hogs, horses, poultry, and sheep.

§ 180.214 Fenthion; tolerances for residues.

Tolerances are established for residues of the insecticide fenthion (*O,O*-dimethyl *O*-[4-(methylthio)-*m*-tolyl] phosphorothioate) and its cholinesterase-inhibiting metabolites in or on raw agricultural commodities as follows:

18 parts per million in or on alfalfa hay and grass hay.

5 parts per million in or on alfalfa and grass.

0.1 part per million in or on meat, fat, and meat byproducts of cattle and poultry.

0.01 part per million (negligible residue) in milk.

§ 180.215 Naled; tolerances for residues.

Tolerances for residues of the insecticide naled (1,2-dibromo-2,2-dichloroethyl dimethyl phosphate) and its conversion product 2,2-dichlorovinyl dimethyl phosphate, expressed as naled, in or on raw agricultural commodities are established as follows:

3 parts per million in or on grapefruit, lemons, oranges, spinach, Swiss chard, tangerines, turnip tops.

1 part per million in or on broccoli, brussels sprouts, cabbage, cauliflower, lettuce, strawberries.

0.5 part per million in or on cucumbers, eggplants, melons, peppers, pumpkins, rice, summer squash, tomatoes, winter squash.

§ 180.216 3-[*p*-(*p*-Chlorophenoxy) phenyl]-1,1-dimethylurea; tolerances for residues.

Tolerances for negligible residues of the herbicide 3-[*p*-(*p*-chlorophenoxy) phenyl]-1,1-dimethylurea in or on raw agricultural commodities are established as follows:

0.15 part per million in or on soybeans and soybean forage.

0.1 part per million in or on carrots, onions (dry bulb), and strawberries.

§ 180.217 Ammoniates for [ethylenebis(dithiocarbamate)] zinc and ethylenebis [dithiocarbamic acid] bimolecular and trimolecular cyclic anhydrosulfides and disulfides; tolerances for residues.

Tolerances for residues of a fungicide that is a mixture of 5.2 parts by weight of ammoniates of [ethylenebis(dithiocarbamate)] zinc with 1 part by weight ethylenebis [dithiocarbamic acid] bimolecular and trimolecular cyclic anhydrosulfides and disulfides, calculated as zinc ethylenebis(dithiocarbamate), in or on raw agricultural commodities are established as follows:

7 parts per million in or on apples.
5 parts per million in or on celery, cantaloups, cucumbers, tomatoes.

0.5 part per million (negligible residue) in or on pecans and potatoes.

§ 180.218 Isopropyl 4,4'-dichlorobenzilate; tolerance for residues.

A tolerance of 5 parts per million is established for residues of the insecticide isopropyl 4,4'-dichlorobenzilate in or on apples and pears.

§ 180.219 2,3,5-Triiodobenzoic acid; tolerances for residues.

Tolerances for negligible residues of the plant regulator 2,3,5-triiodobenzoic acid and its dimethylamine salt (calculated as 2,3,5-triiodobenzoic acid) in or on raw agricultural commodities are established as follows:

0.15 part per million in or on soybeans.
0.05 part per million in or on apples.

§ 180.220 Atrazine; tolerances for residues.

Tolerances for residues of the herbicide atrazine (2-chloro-4-ethylamino-6-isopropylamino-*s*-triazine) in or on raw agricultural commodities are established as follows:

15 parts per million in or on corn forage or fodder (including field corn, sweet corn, and popcorn), perennial rye grass, sorghum fodder and forage.

10 parts per million in or on pineapple fodder and forage.

5 parts per million in or on wheat fodder and straw.

0.25 part per million in or on fresh corn including sweet corn (kernels plus

cobs with husks removed), corn grain (includes popcorn), macadamia nuts, pineapples, sorghum grain, sugarcane, sugarcane fodder and forage, wheat grain.

0.02 part per million (negligible residue) in eggs; milk; meat, fat, and meat byproducts of cattle, goats, hogs, horses, poultry, and sheep.

§ 180.221 *O*-ethyl *S*-phenyl ethylphosphonodithioate; tolerances for residues.

Tolerances are established for residues of the insecticide *O*-ethyl *S*-phenyl ethylphosphonodithioate including its oxygen analog (*O*-ethyl *S*-phenyl ethylphosphonothiolate) in or on raw agricultural commodities as follows:

0.5 part per million in or on asparagus.

0.1 part per million (negligible residue) in or on beans (except lima beans), fresh corn including sweet corn (kernels plus cob with husk removed), corn grain (includes popcorn), corn forage or fodder (including sweet corn, field corn, and popcorn), leafy vegetables, mint (peppermint, spearmint, peppermint hay, and spearmint hay), peanuts, peanut hay, root crop vegetables, strawberries, sugar beet tops, and sugarcane.

Any person who will be adversely affected by the foregoing order may at any time within 30 days after its date of publication in the FEDERAL REGISTER file with the Objections Clerk, Environmental Protection Agency, 1626 K Street NW., Washington, DC 20460, written objections thereto in quintuplicate. Objections shall show wherein the person filing will be adversely affected by the order and specify with particularity the provisions of the order deemed objectionable and the grounds for the objections. If a hearing is requested, the objections must state the issues for the hearing. A hearing will be granted if the objections are supported by grounds legally sufficient to justify the relief sought. Objections may be accompanied by a memorandum or brief in support thereof.

§ 180.222 2,4-Bis(isopropylamino)-6-methylthio-*s*-triazine; tolerances for residues.

Tolerances for residues of the herbicide 2,4-bis(isopropylamino)-6-methylthio-*s*-triazine are established in or on raw agricultural commodities as follows:

1 part per million in or on cotton forage.

0.5 part per million in or on celery.

0.25 part per million in or on corn grain (includes popcorn), fresh corn including sweet corn (kernels plus cobs with husks removed), corn forage and fodder (including field corn, sweet corn, and popcorn), and cottonseed.

§ 180.223 2,4-Dichlorophenyl *p*-nitrophenyl ether; tolerances for residues.

Tolerances for residues of the herbicide 2,4-dichlorophenyl *p*-nitrophenyl ether in or on raw agricultural commodities are established as follows:

0.75 part per million in or on broccoli, brussels sprouts, cabbage, carrots, cauliflower, celery, kohlrabi, onions (green or in dry bulb form), and parsley.

0.05 part per million (negligible residue) in or on horseradish and sugar beets (roots and tops).

§ 180.224 Gibberellic acid; tolerances for residues.

Tolerances are established for negligible residues of the plant regulator gibberellic acid in or on the raw agricultural commodities artichokes, citrus fruits, grapes, hops, leafy vegetables, and stone fruits at 0.15 part per million.

§ 180.225 Aluminum phosphide; tolerances for residues.

Tolerances are established for residues of the fumigant phosphine from treatment with aluminum phosphide at 0.1 part per million in or on the raw agricultural commodities barley, corn, millet, oats, rice, rye, sorghum, and wheat.

§ 180.226 Diquat; tolerances for residues.

A tolerance of 0.05 part per million is established for negligible residues of the plant regulator diquat (6,7-dihydrodipyrido (1,2-*a*:2',1'-*c*) pyrazidinium), derived from application of the dibromide salt and calculated as the cation, in or on the raw agricultural commodity sugar-

§ 180.227 Dicamba; tolerances for residues.

Tolerances are established for the combined residues of the herbicide dicamba (3,6-dichloro-*o*-anisic acid) and its metabolite 3,6-dichloro-5-hydroxy-*o*-anisic acid in or on raw agricultural commodities as follows:

40 parts per million in or on grasses (pasture and rangeland) and grass hay.
3 parts per million in or on sorghum (grain, fodder, and forage).

0.5 part per million in or on corn (grain, fodder, and forage) and grain and straw of barley, oats, and wheat.

0.05 part per million (negligible residue) in milk.

§ 180.228 *S*-Ethyl hexahydro-1*H*-azepine-1-carbothioate; tolerances for residues.

Tolerances are established for negligible residues of the herbicide *S*-ethyl hexahydro-1*H*-azepine-1-carbothioate in or on the raw agricultural commodities rice and rice straw at 0.1 part per million.

§ 180.229 Fluometuron; tolerances for residues.

Tolerances are established for negligible residues of the herbicide fluometuron (1,1-dimethyl-3-(α,α,α -trifluorom-tolyl)urea) in or on the raw agricultural commodities cottonseed and sugarcane at 0.1 part per million.

§ 180.230 Diphenamid; tolerances for residues.

Tolerances are established for residues of the herbicide diphenamid (*N,N*-

dimethyl-2,2-diphenylacetamide) including its desmethyl metabolite (*N*-methyl-2,2-diphenylacetamide) in or on raw agricultural commodities as follows:

1 part per million in or on potatoes and strawberries.

0.1 part per million (negligible residue) in or on the commodity group fruiting vegetables.

§ 180.231 Dichlobenil; tolerances for residues.

Tolerances are established for the combined negligible residues of the herbicide dichlobenil (2,6-dichlorobenzonitrile) and its metabolite 2,6-dichlorobenzoic acid in or on the raw agricultural commodities: Almond hulls, apples, avocados, blackberries, blueberries, citrus, cranberries, figs, grapes, mangoes, nuts, pears, raspberries, and stone fruits at 0.15 part per million.

§ 180.232 *S*-Ethyl diisobutylthiocarbamate; tolerances for residues.

Tolerances are established for negligible residues of the herbicide *S*-ethyl diisobutylthiocarbamate in or on the raw agricultural commodities corn grain (including popcorn), fresh corn including sweet corn (kernels plus cob with husk removed), and corn forage and fodder (including sweet corn, field corn, and popcorn) at 0.1 part per million.

§ 180.233 *O,O*-Dimethyl *O-p*-(dimethylsulfamoyl)phenyl phosphorothioate including its oxygen analog; tolerances for residues.

Tolerances are established for residues of the insecticide *O,O*-dimethyl *O-p*-(dimethylsulfamoyl)phenyl phosphorothioate including its oxygen analog (*O,O*-dimethyl *O-p*-(dimethylsulfamoyl)phenyl phosphate) in or on the raw agricultural commodities meat, fat, and meat byproducts of cattle at 0.1 part per million.

§ 180.234 *O,O*-Diethyl *O*-[*p*-(methylsulfinyl)phenyl] phosphorothioate; tolerances for residues.

Tolerances are established for the combined residues of the insecticide *O,O*-diethyl *O*-[*p*-(methylsulfinyl)phenyl] phosphorothioate and its cholinesterase-inhibiting metabolites in or on raw agricultural commodities as follows:

5 parts per million in or on peanut hulls.

1 part per million in or on corn forage and fodder (including field corn, popcorn, and sweet corn).

0.1 part per million in or on corn grain (including field corn and popcorn), fresh corn including sweet corn (kernels plus cobs with husk removed), onions (dry), potatoes, rutabagas (roots), and tomatoes.

0.05 part per million in or on peanuts, pineapples, pineapple forage, sugar beets, and sugar beet tops.

0.02 part per million (negligible residue) in or on bananas and sugarcane.

0.02 part per million in meat, fat, and meat byproducts of cattle, goats, and sheep.

§ 180.235 2,2-Dichlorovinyl dimethyl phosphate; tolerances for residues.

Tolerances for residues of the insecticide 2,2-dichlorovinyl dimethyl phosphate are established as follows:

2 parts per million from postharvest application in or on nonperishable packaged or bagged raw agricultural commodities that contain more than 6 percent fat.

1 part per million (expressed as naled) in or on lettuce.

0.5 part per million (expressed as naled) in or on cucumbers.

0.5 part per million (expressed as naled) in or on tomatoes from preharvest and postharvest application.

0.5 part per million in or on radishes.

0.5 part per million from postharvest application in or on nonperishable packaged or bagged raw agricultural commodities that contain 6 percent fat or less.

0.02 part per million (negligible residue) in meat, fat, and meat byproducts of cattle, goats, horses, and sheep and in milk.

The tolerance of 0.1 part per million prescribed by § 135g.75 for negligible residues of 2,2-dichlorovinyl dimethyl phosphate in the edible tissues of swine covers both its use as an anthelmintic in swine feed and as an insecticide applied directly to swine.

§ 180.236 Triphenyltin hydroxide; tolerances for residues.

Tolerances are established for residues of the fungicide triphenyltin hydroxide in or on raw agricultural commodities as follows:

0.4 part per million in or on peanut hulls.

0.1 part per million (negligible residue) in or on sugar beets (but not tops).

0.05 part per million (negligible residue) in or on pecans, peanuts, and potatoes.

0.05 part per million (negligible residue) in the kidney and liver of cattle, goats, hogs, horses, and sheep.

§ 180.237 4-(Methylsulfonyl)-2,6-dinitro-*N,N*-dipropylaniline; tolerances for residues.

Tolerances are established for negligible residues of the herbicide 4-(methylsulfonyl)-2,6-dinitro-*N,N*-dipropylaniline in or on the raw agricultural commodities broccoli, brussels sprouts, cabbage, cauliflower, cottonseed, cucumbers, forage legumes, fruiting vegetables, peanuts, safflower seed, seed and pod vegetables, soybeans (dry form), and watermelons at 0.1 part per million.

§ 180.238 *S*-Propyl butylethylthiocarbamate; tolerances for residues.

Tolerances are established for negligible residues of the herbicide *S*-propyl butylethylthiocarbamate in or on the raw agricultural commodities sugar beets (roots and tops) and tomatoes at 0.1 part per million.

§ 180.239 Phosphamidon; tolerances for residues.

Tolerances (expressed as phosphamidon) for residues of the insecticide phosphamidon (2-chloro-2-diethylcarbamoyl-1-methylvinyl dimethyl phosphate) including all of its related cholinesterase-inhibiting compounds in or on raw agricultural commodities are established as follows:

1 part per million in or on apples.

0.75 part per million in or on grapefruit, lemons, oranges, tangerines.

0.5 part per million in or on broccoli, cauliflower, cucumbers, peppers.

0.25 part per million in or on cantaloups, watermelons.

0.1 part per million in or on cottonseed, potatoes, sugarcane, tomatoes and walnuts.

§ 180.240 *S*-Propyl dipropylthiocarbamate; tolerances for residues.

Tolerances are established for negligible residues of the herbicide *S*-propyl dipropylthiocarbamate in or on the raw agricultural commodities peanuts, peanut forage, peanut hay, potatoes, soybeans, soybean forage, soybean hay, and sweetpotatoes at 0.1 part per million.

§ 180.241 *S*-(*O,O*-Diisopropyl phosphorodithioate) of *N*-(2-mercaptoethyl)benzenesulfonamide; tolerances for residues.

Tolerances are established for negligible residues of the herbicide *S*-(*O,O*-diisopropyl phosphorodithioate) of *N*-(2-mercaptoethyl)benzenesulfonamide including its oxygen analog *S*-(*O,O*-diisopropyl phosphorothioate) of *N*-(2-mercaptoethyl)benzenesulfonamide in or on the raw agricultural commodities carrots, cottonseed, cucurbits, fruiting vegetables, leafy vegetables, and onions (dry bulb) at 0.1 part per million.

§ 180.242 Thiabendazole; tolerances for residues.

Tolerances are established for residues of the fungicide thiabendazole (2-(4-thiazolyl)-benzimidazole) in or on raw agricultural commodities as follows:

3 parts per million in or on bananas (from postharvest application) of which not more than 0.4 part per million shall be present in the pulp after the peel is removed and discarded.

2 parts per million in or on citrus fruits (from postharvest application).

0.25 part per million in or on sugar beets (from preharvest application) excluding tops.

§ 180.243 2-Chloro-4,6-bis(isopropylamino)-*s*-triazine; tolerances for residues.

A tolerance of 0.25 part per million is established for negligible residues of the herbicide 2-chloro-4,6-bis(isopropylamino)-*s*-triazine in or on the raw agricultural commodities sorghum grain, forage, and fodder.

§ 180.244 Basic zinc sulfate; tolerances for residues.

A tolerance of 30 parts per million is established for residues of the fungicide basic zinc sulfate, calculated as elemental zinc, in or on the raw agricultural commodity peaches.

§ 180.245 Streptomycin; tolerances for residues.

A tolerance of 0.25 part per million is established for negligible residues of the fungicide streptomycin in or on the raw agricultural commodity group pome fruits for controlling fire blight.

§ 180.246 Succinic acid 2,2-dimethylhydrazide; tolerances for residues.

Tolerances are established for residues of the plant regulator succinic acid 2,2-dimethylhydrazide in or on raw agricultural commodities as follows:

55 parts per million in or on sour cherries.

30 parts per million in or on apples, nectarines, peaches, peanuts, and sweet cherries.

10 parts per million in or on grapes and peanut hay and hulls.

2 parts per million in poultry kidney.

0.2 parts per million in the meat, fat, and meat byproducts of cattle, goats, hogs, horses, poultry (except poultry kidney), and sheep.

0.2 part per million in eggs.

0.2 part per million (negligible residue) in or on tomatoes.

0.02 part per million (negligible residue) in milk.

§ 180.247 2-Chloroallyl diethyldithiocarbamate; tolerances for residues.

Tolerances are established for negligible residues of the herbicide 2-chloroallyl diethyldithiocarbamate in or on raw agricultural commodities bean vines, broccoli, brussels sprouts, cabbage, cantaloups, cauliflower, celery, chicory, collards, corn (kernels plus cob with husk removed), corn fodder and forage, corn grain, cucumbers, endive (escarole), hanover salad, kale, lettuce, lima beans, mustard greens, okra, potatoes, snap beans, soybeans, soybean forage and hay, spinach, tomatoes, turnip greens, turnips, and watermelons at 0.2 part per million.

§ 180.248 Neodecanoic acid; tolerances for residues.

A tolerance of 1 part per million is established for negligible residues of the desiccant and defoliant neodecanoic acid (a mixture of 10-carbon trialkyl acetic acids (calculated as $C_{10}H_{19}COOH$)) in or on the raw agricultural commodity cottonseed.

§ 180.249 2-Chloro-2',6'-diethyl-*N*-(methoxymethyl) acetanilide; tolerances for residues.

Tolerances are established for residues of the herbicide 2-chloro-2',6'-diethyl-

N-(methoxymethyl) acetanilide and its metabolites (calculated as 2-chloro-2',6'-diethyl-*N*-(methoxymethyl) acetanilide) in or on raw agricultural commodities as follows:

0.75 part per million in or on soybean forage.

0.2 part per million (negligible residues) in or on corn fodder and forage, corn grain, cotton forage, peanut forage, and soybeans.

0.05 part per million (negligible residues) in or on cottonseed and peanuts.

0.02 part per million (negligible residues) in milk and eggs and in or on meat, fat, and meat byproducts of cattle, goats, hogs, horses, poultry, and sheep.

§ 180.250 3-(*p*-Bromophenyl)-1-methoxy-1-methylurea; tolerance for residues.

A tolerance of 0.2 part per million is established for residues of the herbicide 3-(*p*-bromophenyl)-1-methoxy-1-methylurea in or on the raw agricultural commodity potatoes.

§ 180.251 Dodecachlorooctahydro-1,3,4-metheno-2*H*-cyclobuta [cd] pentalene; tolerances for residues.

Tolerances for residues of the insecticide dodecachlorooctahydro-1,3,4-metheno-2*H*-cyclobuta [cd] pentalene in or on raw agricultural commodities are established as follows:

0.1 part per million (negligible residue) in the fat of meat from cattle, goats, hogs, horses, poultry, and sheep.

0.1 part per million in milk fat reflecting negligible residues in milk.

0.1 part per million (negligible residue) in eggs.

0.01 part per million (negligible residue) in or on all raw agricultural commodities (exclusive of eggs, milk fat, and the fat of cattle, goats, hogs, horses, poultry, and sheep)

§ 180.252 2-Chloro-1-(2,4,5-trichlorophenyl)vinyl dimethyl phosphate; tolerances for residues.

Tolerances are established for residues of the insecticide 2-chloro-1-(2,4,5-trichlorophenyl)vinyl dimethyl phosphate in or on raw agricultural commodities as follows:

110 parts per million in or on corn forage and fodder (including field corn, sweet corn, and popcorn).

10 parts per million in or on apples, sweet corn (kernels plus cob with husks removed), and corn grain (including field corn and popcorn).

1.5 parts per million in the fat of cattle.

0.75 part per million in the fat of poultry.

0.5 part per million in the meat and meat byproducts of cattle.

0.1 part per million in eggs, meat, and meat byproducts of poultry.

§ 180.253 Methomyl; tolerances for residues.

Tolerances are established for residues of the insecticide methomyl (*S*-methyl *N*-[(methylcarbamoyl)oxy]thioacetimidate) in or on raw agricultural commodities as follows:

10 parts per million in or on corn fodder or forage (including field corn, sweet corn, and popcorn).

5 parts per million in or on cabbage.

0.2 part per million (negligible residue) in or on the commodity groups fruiting vegetables, leafy vegetables (except cabbage), and root crop vegetables.

0.1 part per million (negligible residue) in or on corn grain (including popcorn), fresh corn including sweet corn (kernels plus cob with husk removed).

§ 180.254 Carbofuran; tolerances for residues.

Tolerances are established for combined residues of the insecticide carbofuran (2,3-dihydro-2,2-dimethyl-7-benzofuranyl *N*-methylcarbamate) and its metabolite 2,3-dihydro-2,2-dimethyl-3-hydroxy-7-benzofuranyl *N*-methylcarbamate in or on the following raw agricultural commodities:

20 parts per million in or on alfalfa hay.

5 parts per million in or on alfalfa (fresh).

1 part per million in or on peanut hulls.

0.5 part per million in or on corn fodder and forage.

0.2 part per million in or on rice and rice straw.

0.1 part per million in or on corn grain, peanuts, and sugarcane.

0.02 part per million (negligible residue) in milk.

§ 180.255 *m*-(1-Methylbutyl)-phenyl methylcarbamate and *m*-(1-ethylpropyl)phenylmethylcarbamate; tolerances for residues.

Tolerances are established for negligible residues of an insecticide that is a mixture consisting of 75 percent *m*-(1-methylbutyl)phenyl methylcarbamate and 25 percent *m*-(1-ethylpropyl)phenyl methylcarbamate in or on the raw agricultural commodities corn grain, fresh corn including sweet corn (kernels plus cob with husk removed), and corn fodder and forage at 0.05 part per million (such tolerances to cover residues of both components).

§ 180.256 *p*-Chlorophenyl-2,4,5-trichlorophenyl sulfide; tolerances for residues.

A tolerance of 0.1 part per million is established for negligible residues of the insecticide *p*-chlorophenyl-2,4,5-trichlorophenyl sulfide in or on the raw agricultural commodity apples.

§ 180.257 Chloroneb; tolerances for residues.

Tolerances are established for residues of the fungicide chloroneb (1,4-dichloro-2,5-dimethoxybenzene) and its metabolite 2,5-dichloro-4-methoxyphenol (calculated as chloroneb) in or on raw agricultural commodities as follows:

2 parts per million in or on cotton forage and vines (forage) of beans and soybeans.

0.2 part per million in meat, fat, and meat byproducts of cattle, goats, hogs, horses, and sheep.

0.1 part per million (negligible residue) in or on beans, cottonseed, soybeans, and sugarbeets (roots and tops).

0.05 part per million (negligible residue) in milk.

§ 180.258 2-Ethylamino-4-isopropylamino-6-methylthio-*s*-triazine; tolerances for residues.

Tolerances are established for residues of the desiccant and herbicide 2-ethylamino-4-isopropylamino-6-methylthio-*s*-triazine in or on raw agricultural commodities as follows:

0.5 part per million in or on corn fodder and forage.

0.25 part per million in or on bananas, corn grain, fresh corn including sweet corn (kernels plus cob with husk removed), pineapples, pineapple fodder and forage, potatoes, sugarcane, and sugarcane fodder and forage.

§ 180.259 2-(*p*-*tert*-Butylphenoxy)cyclohexyl 2-propynyl sulfite; tolerances for residues.

Tolerances are established for residues of the insecticide 2-(*p*-*tert*-butylphenoxy)cyclohexyl 2-propynyl sulfite in or on raw agricultural commodities as follows:

15 parts per million in or on hops.

7 parts per million in or on apricots, peaches, and strawberries.

4 parts per million in or on nectarines.

3 parts per million in or on apples, pears, and plums (fresh prunes).

0.1 part per million (negligible residue) in or on walnuts.

§ 180.260 Norea; tolerances for residues.

Tolerances are established for negligible residues of the herbicide norea (3-(hexahydro-4,7-methanoindan-5-yl)-1,1-dimethyl urea) in or on the raw agricultural commodities cottonseed, potatoes, sorghum (cane, forage, and grain), soybeans, spinach, and sugarcane at 0.2 part per million.

§ 180.261 *N*-(Mercaptomethyl)phthalimide *S*-(*O,O*-dimethyl phosphorodithioate) and its oxygen analog; tolerances for residues.

Tolerances are established for the cholinesterase-inhibiting residues of the insecticide *N*-(mercaptomethyl)phthalimide *S*-(*O,O*-dimethyl phosphorodithioate) and its oxygen analog *N*-(mercaptomethyl)phthalimide *S*-(*O,O*-dimethyl phosphorothioate) in or on raw agricultural commodities as follows:

40 parts per million in or on alfalfa.

10 parts per million in or on apples, cherries, grapes, peaches, and pears.

5 parts per million in or on apricots, nectarines, and plums (fresh prunes).

0.2 part per million in meat and fat of meat of cattle, goats, hogs, and sheep.

0.1 part per million in or on potatoes.

§ 180.262 *O*-Ethyl *S,S*-dipropylphosphorodithioate; tolerances for residues.

Tolerances are established for negligible residues of the insecticide *O*-ethyl *S,S*-dipropylphosphorodithioate in or on the raw agricultural commodities bananas, corn (in the grain and ear form),

corn fodder and forage (including field corn and sweet corn), fresh corn including sweet corn (kernels plus cob with husks removed), peanuts, peanut hay, pineapples, pineapple fodder and forage, soybeans, soybean forage and hay, and sweetpotatoes at 0.02 part per million.

Any person who will be adversely affected by the foregoing order may at any time within 30 days after its date of publication in the FEDERAL REGISTER file with the Objections Clerk, Environmental Protection Agency, 1626 K Street NW., Washington, DC 20460, written objections thereto in quintuplicate. Objections shall show wherein the person filing will be adversely affected by the order and specify with particularity the provisions of the order deemed objectionable and the grounds for the objections. If a hearing is requested, the objections must state the issues for the hearing. A hearing will be granted if the objections are supported by grounds legally sufficient to justify the relief sought. Objections may be accompanied by a memorandum or brief in support thereof.

§ 180.263 Phosalone; tolerances for residues.

Tolerances are established for residues of the insecticide phosalone (S-(6-chloro-3-(mercaptomethyl)-2-benzoxazolinone) O,O-diethyl phosphorodithioate) in or on raw agricultural commodities as follows:

10 parts per million in or on apples, grapes, and pears.

0.05 part per million (negligible residue) in or on brazil nuts, bush nuts, butternuts, cashews, chestnuts, filberts, hazelnuts, hickory nuts, macadamia nuts, pecans, and walnuts.

§ 180.264 O,O-Diethyl O-2-pyrazinyl phosphorothioate and its oxygen analog; tolerances for residues.

A tolerance of 0.1 part per million is established for negligible residues of the insecticide and nematocide O,O-diethyl O-2-pyrazinyl phosphorothioate and its oxygen analog diethyl 2-pyrazinyl phosphate in or on the raw agricultural commodities broccoli, brussels sprouts, cabbage, cauliflower, corn forage or fodder (including sweet corn, field corn, popcorn), corn grain, fresh corn including sweet corn (kernels plus cob with husks removed), cottonseed, mint, snap beans, snap bean vines, strawberries, and sugar beets (roots and tops).

§ 180.265 2-tert-Butylamino-4-ethylamino-6-methylthio-s-triazine; tolerance for residues.

A tolerance of 0.1 part per million is established for negligible residues of the herbicide 2-tert-butylamino-4-ethylamino-6-methylthio-s-triazine in or on the raw agricultural commodity wheat (grain, green fodder, and straw).

§ 180.266 Amiben; tolerances for residues.

Tolerances for negligible residues of the herbicide amiben (3-amino-2,5-dichlorobenzoic acid) are established in or on the raw agricultural commodities, beans (dried), bean vines, cantaloups, cucumbers, field corn (grain, fodder and

forage), lima beans, peanuts, peanut forage, peppers, pumpkins, snap beans, soybeans, soybean forage, squash (summer and winter), sunflower seed, sweet potatoes, and tomatoes at 0.1 part per million.

§ 180.267 cis-N-[(1,1,2,2-Tetrachloroethyl)thio]-4-cyclohexene-1,2-dicarboximide; tolerances for residues.

Tolerances are established for residues of the fungicide cis-N-[(1,1,2,2-tetrachloroethyl)thio]-4-cyclohexene-1,2-dicarboximide in or on raw agricultural commodities as follows:

50 parts per million in or on cherries (sour).

30 parts per million in or on apricots and peaches.

15 parts per million in or on tomatoes.

8 parts per million in or on cranberries.

5 parts per million in or on melons.

2 parts per million in or on cherries (sweet), cucumbers, nectarines, and plums (fresh prunes).

0.5 part per million in or on citrus fruits and potatoes.

0.25 part per million in or on apples.

0.1 part per million (negligible residue) in or on macadamia nuts, onions, and pineapples.

§ 180.268 Barban; tolerances for residues.

A tolerance of 0.1 part per million is established for negligible residues of the herbicide barban (4-chloro-2-butynyl m-chlorocarbanilate) in or on the raw agricultural commodities barley, flax seed, lentils, mustard seed, peas, safflower seed, soybeans, sugar beets, sugar beet tops, sunflower seed, and wheat.

§ 180.269 Aldicarb; tolerances for residues.

Tolerances are established for residues of the insecticide and nematocide aldicarb (2-methyl-2-(methylthio)propionaldehyde O-(methylcarbamoyl) oxime) and its cholinesterase-inhibiting metabolites 2-methyl-2-(methylsulfinyl)propionaldehyde O-(methylcarbamoyl) oxime and 2-methyl-2-(methylsulfonyl)propionaldehyde O-(methylcarbamoyl) oxime in or on raw agricultural commodities as follows:

1 part per million in or on sugar beet tops.

0.1 part per million in or on cottonseed.

0.05 part per million in or on sugar beets.

0.01 part per million (negligible residue) in the meat, fat, and meat byproducts of cattle, goats, hogs, and sheep.

§ 180.270 Benzadox; tolerances for residues.

Tolerances are established for negligible residues of the herbicide benzadox (benzamidooxyacetic acid) in or on the raw agricultural commodities sugar beet roots and tops at 0.1 part per million.

§ 180.271 Boron; tolerances for residues.

Tolerances for total boron, calculated as elemental boron, are established as follows:

30 parts per million in or on cottonseed to cover residues from application of the defoliant, desiccant, and herbicide sodium borate (including sodium metaborate and sodium tetraborate) plus naturally occurring boron in cottonseed.

8 parts per million in or on citrus fruits to cover residues from postharvest application of the fungicides borax and boric acid plus the naturally occurring boron in citrus fruits.

§ 180.272 S,S,S-Tributyl phosphorothioate; tolerances for residues.

Tolerances are established for residues of the defoliant S,S,S-tributyl phosphorothioate in or on raw agricultural commodities as follows:

4 parts per million in or on cottonseed.

0.02 part per million (negligible residue) in meat, fat, and meat byproducts of cattle, goats, and sheep.

0.002 part per million (negligible residue) in milk.

§ 180.273 Trichlorobenzyl chloride; tolerances for residues.

Tolerances are established for negligible residues of the herbicide trichlorobenzyl chloride and its metabolite trichlorobenzoic acid in or on raw agricultural commodities as follows:

0.1 part per million in or on corn forage and fodder (including field corn, popcorn, and sweet corn).

0.02 part per million in or on corn grain including field corn, popcorn, and sweet corn (kernels plus cob with husk removed).

§ 180.275 2,4,5,6-Tetrachloroisophthalonitrile; tolerances for residues.

Tolerances are established for the combined residues of the fungicide 2,4,5,6-tetrachloroisophthalonitrile and its metabolite 4-hydroxy-2,5,6-trichloroisophthalonitrile in or on raw agricultural commodities as follows:

15 parts per million in or on celery.

5 parts per million in or on broccoli, brussels sprouts, cabbage, cauliflower, cucumbers, melons, pumpkins, snap beans, squash (summer and winter), and tomatoes.

1 part per million in or on carrots and sweet corn (kernels plus cob with husks removed).

0.3 part per million in or on peanuts.

0.1 part per million (negligible residue) in or on potatoes.

§ 180.276 Formetanate hydrochloride; tolerances for residues.

Tolerances are established for residues of the insecticide formetanate hydrochloride (m-[(dimethylamino)methylene]amino]phenyl methylcarbamate hydrochloride) in or on raw agricultural commodities as follows:

4 parts per million in or on lemons, limes, and oranges.

3 parts per million in or on apples and pears.

§ 180.277 S-2,3-Dichloroallyl diisopropylthiocarbamate; tolerances for residues.

Tolerances are established for negligible residues of the herbicide S-2,3-

dichloroallyl diisopropylthiocarbamate in or on the raw agricultural commodities alfalfa (fresh and hay), barley (grain, forage, and straw), clover (fresh and hay), field corn grain, fodder and forage, flaxseed, lentils, peas, pea forage and hay, potatoes, safflower seed, soybeans, soybean forage and hay, and sugar beet roots and tops at 0.05 part per million.

§ 180.278 Phenmedipham; tolerances for residues.

Tolerances are established for negligible residues of the herbicide phenmedipham (methyl *m*-hydroxycarbamate *m*-methylcarbanilate) in or on the raw agricultural commodities sugar beet roots and tops at 0.1 part per million.

§ 180.279 3-(4-Bromo-3-chlorophenyl)-1-methoxy-1-methylurea; tolerances for residues.

Tolerances are established for negligible residues of the herbicide 3-(4-bromo-3-chlorophenyl)-1-methoxy-1-methylurea in or on the raw agricultural commodities corn in grain or ear form (including field corn, sweet corn, and popcorn) and corn forage and fodder (including field corn, sweet corn, and popcorn) at 0.2 part per million.

§ 180.280 Dimethyl phosphate of α -methylbenzyl 3-hydroxy-*cis*-crotonate; tolerances for residues.

Tolerances are established for negligible residues of the insecticide dimethyl phosphate of α -methylbenzyl 3-hydroxy-*cis*-crotonate in meat, fat, and meat byproducts of cattle, goats, hogs, and sheep and in milk at 0.02 part per million.

§ 180.281 2-*sec*-Butyl-4,6-dinitrophenol; tolerances for residues.

Tolerances are established for residues of the herbicide 2-*sec*-butyl-4,6-dinitrophenol from application of its alkanolamine salts (of the ethanol and isopropanol series) in or on raw agricultural commodities as follows:

1 part per million in or on soybean forage.

0.1 part per million (negligible residue) in or on soybeans.

§ 180.282 2-Chloro-*N,N*-diallylaceta-mide; tolerances for residues.

Tolerances are established for negligible residues of the herbicide 2-chloro-*N,N*-diallylaceta-mide in or on the raw agricultural commodities cabbage, castor beans, celery, corn grain (includes popcorn), fresh corn including sweet corn (kernels plus cobs with husk removed), corn forage or fodder (including sweet corn, field corn, and popcorn), dried beans, lima beans, lima bean forage, onions, peas, pea forage, potatoes, snap beans, snap bean forage, sorghum grain, sorghum forage, soybeans, soybean forage, sugarcane, sweetpotatoes, and tomatoes at 0.05 part per million.

§ 180.283 2, 3, 6-Trichlorophenylacetic acid; tolerances for residues.

A tolerance of 0.1 part per million is established for negligible residues of the herbicide 2, 3, 6-trichlorophenylacetic acid in or on sugarcane, such residues resulting from application of its dimethylamine or sodium salts.

§ 180.284 Zinc phosphide; tolerances for residues.

A tolerance of 0.01 part per million is established for residues of phosphine in or on the raw agricultural commodity sugarcane from use of the rodenticide zinc phosphide in sugarcane fields.

§ 180.285 *N'*-(4-Chloro-*o*-tolyl)-*N,N*-dimethylformamide; tolerances for residues.

Tolerances are established for combined residues of the insecticide *N'*-(4-chloro-*o*-tolyl)-*N,N*-dimethylformamide and its metabolites containing the 4-chlorotoluidine moiety (calculated as the insecticide) from application of the insecticide as the free base or as the hydrochloride salt in or on raw agricultural commodities as follows:

5 parts per million in or on pears.

3 parts per million in or on apples.

Two parts per million in or on broccoli, brussels sprouts, cabbage, and cauliflower.

§ 180.286 1-Chloro-2-nitropropane; tolerances for residues.

A tolerance of 0.05 part per million is established for negligible residues of the fungicide 1-chloro-2-nitropropane and its metabolite 2-nitropropanol (calculated as 1-chloro-2-nitropropane) in or on the raw agricultural commodities cottonseed and melons.

§ 180.287 Decachlorooctahydro-1, 3, 4-metheno-2H-cyclobuta[cd]pentalen-2-one; tolerance for residues.

A tolerance of 0.01 part per million is established for negligible residues of the insecticide decachlorooctahydro-1,3,4-metheno-2H-cyclobuta[cd]pentalen-2-one in or on the raw agricultural commodity bananas.

§ 180.288 2-(Thiocyanomethylthio)benzothiazole; tolerances for residues.

A tolerance of 0.1 part per million is established for negligible residues of the fungicide 2-(thiocyanomethylthio)benzothiazole in or on cottonseed.

§ 180.289 Methanearsonic acid; tolerances for residues.

A tolerance of 0.7 part per million (expressed as As₂O₃) is established for residues of the herbicide methanearsonic acid in, or on cottonseed, from application of the disodium and monosodium salts of methanearsonic acid in the production of cotton.

§ 180.290 *p*-Nitrophenyl 2-nitro-4-(trifluoromethyl)phenyl ether; tolerances for residues.

A tolerance of 0.1 part per million is established for negligible residues of the herbicide *p*-nitrophenyl 2-nitro-4-(trifluoromethyl)phenyl ether and its metabolites *p*-nitrophenyl 2-amino-4-(trifluoromethyl)phenyl ether and *p*-nitrophenol in or on the raw agricultural commodities seed and pod vegetables and their forages, soybeans and soybean forage.

§ 180.291 Pentachloronitrobenzene; tolerance for residues.

A tolerance of 0.1 part per million is established for negligible residues of the

fungicide pentachloronitrobenzene in or on the raw agricultural commodity cottonseed.

§ 180.292 4-Amino-3,5,6-trichloropicolinic acid; tolerances for residues.

Tolerances are established for residues of the herbicide 4-amino-3,5,6-trichloropicolinic acid from its application in the acid form, or in the form of its potassium, triethylamine or triisopropanolamine salts expressed as 4-amino-3,5,6-trichloropicolinic acid in or on raw agricultural commodities as follows:

80 parts per million in or on forage grasses.

5 parts per million in the kidney of cattle, goats, and sheep.

0.5 part per million in the liver of cattle, goats, and sheep.

0.2 part per million in the meat, fat, and meat byproducts (other than kidney and liver) of cattle, goats, and sheep.

0.05 part per million (negligible residue) in milk.

§ 180.293 Endothall; tolerances for residues.

A tolerance of 0.1 part per million is established for negligible residues of the defoliant endothall (7-oxabicyclo-(2.2.1)heptane-2,3-dicarboxylic acid) from use of its mono-*N,N*-dimethylalkylamine salt, wherein the alkyl group is the same as in the fatty acids of coconut oil, in or on the raw agricultural commodity cottonseed.

§ 180.294 Benomyl; tolerances for residues.

Tolerances are established for residues of the fungicide benomyl (methyl 1-(butylcarbamoyl)-2-benzimidazolecarbamate) in or on raw agricultural commodities as follows:

15 parts per million (from postharvest and/or preharvest application) in or on apricots, cherries, nectarines, peaches, and plums (including fresh prunes).

2 parts per million in or on snap beans (succulent).

1 part per million in or on bananas, of which not more than 0.2 part per million (negligible residue) shall be present in the pulp after the peel is removed and discarded, from postharvest application.

0.2 part per million in or on peanuts and sugar beet roots.

§ 180.295 4-*tert*-Butyl-2-chlorophenyl methyl methylphosphoramidate; tolerances for residues.

A tolerance of 1 part per million is established for residues of the insecticide 4-*tert*-butyl-2-chlorophenyl methyl methylphosphoramidate and its metabolite 4-*tert*-butyl-2-chlorophenol (calculated as the parent compound) in the meat, fat, and meat byproducts of cattle, goats, and sheep.

§ 180.296 Dimethyl phosphate of 3-hydroxy-*N*-methyl-*cis*-crotonamide; tolerances for residues.

A tolerance is established for residues of the insecticide dimethyl phosphate of 3-hydroxy-*N*-methyl-*cis*-crotonamide in or on cottonseed, potatoes, and sugarcane at 0.1 part per million.

§ 180.297 *N*-1-Naphthyl phthalamic acid; tolerances for residues.

A tolerance of 0.1 part per million is established for negligible residues of the herbicide *N*-1-naphthyl phthalamic acid from application of its sodium salt in or on the raw agricultural commodities cantaloups, cranberries, cucumbers, muskmelons, peanuts, peanut hay, soybeans, soybean hay, and watermelons.

§ 180.298 *O,O*-Dimethyl phosphorodithioate, *S*-ester with 4-(mercaptomethyl)-2-methoxy- Δ^2 -1,3,4-thiadiazolin-5-one; tolerances for residues.

Tolerances for residues of the insecticide *O,O*-dimethyl phosphorodithioate, *S*-ester with 4-(mercaptomethyl)-2-methoxy- Δ^2 -1,3,4-thiadiazolin-5-one are established in or on raw agricultural commodities as follows:

8 parts per million in or on alfalfa, alfalfa hay, clover, clover hay, grass, and grass hay.
0.2 part per million in or on cottonseed.

§ 180.300 Ethephon; tolerances for residues.

A tolerance is established for negligible residues of the plant regulator ethephon (2-chloroethyl)phosphonic acid in or on the raw agricultural commodity pineapples at 0.1 part per million.

§ 180.301 Carboxin; tolerance for residues.

A tolerance is established for combined negligible residues of the fungicide carboxin (5,6-dihydro-2-methyl-1,4-oxathin-3-carboxanilide) and its metabolite 5,6-dihydro-3-carboxanilide-2-methyl-1,4-oxathin-4-oxide (calculated as carboxin) in or on the raw agricultural commodity cottonseed at 0.2 part per million.

Any person who will be adversely affected by the foregoing order may at any time within 30 days after its date of publication in the FEDERAL REGISTER file with the Objections Clerk, Environmental Protection Agency, 1626 K Street NW., Washington, DC 20460, written objections thereto in quintuplicate. Objections shall show wherein the person filing will be adversely affected by the order and specify with particularity the provisions of the order deemed objectionable and the grounds for the objections. If a hearing is requested, the objections must state the issues for the hearing. A hearing will be granted if the objections are supported by grounds legally sufficient to justify the relief sought. Objections may be accompanied by a memorandum or brief in support thereof.

§ 180.302 Hexachlorophene; tolerance for residues.

A tolerance of 0.05 part per million is established for negligible residues of the fungicide hexachlorophene (2,2'-methylenebis(3,4,6-trichlorophenol)) in or on the raw agricultural commodity cottonseed from the use of its monosodium salt on the growing crop cotton before the bolls are open. For the purposes of this

section the technical grade hexachlorophene used in the formulation shall not contain more than 0.1 part per million of 2,3,7,8-tetrachlorodibenzo-*p*-dioxin.

§ 180.303 Acetic acid; tolerances for residues.

Tolerances are established for residues of the fungicide acetic acid in or on the grains of barley, corn, oats, sorghum, and wheat at 12,000 parts per million from postharvest application. These grains are for use only as animal feeds.

§ 180.304 Propionic acid; tolerances for residues.

Tolerances are established for residues of the fungicide propionic acid in or on the grains of barley, corn, oats, sorghum, and wheat at 8,000 parts per million from postharvest application. These grains are for use only as animal feeds.

Tolerances are established for negligible residues of an insecticide that is a mixture consisting of 3,4,5-trimethylphenyl methylcarbamate and 2,3,5-trimethylphenyl methylcarbamate isomers, which are present in ratios varying between 4:1 and 3:1, respectively, in or on the raw agricultural commodities corn grain (including field corn and popcorn) and corn fodder and forage at 0.1 part per million (such tolerance to cover the sum of the residues of both components).

Subpart D—Exemptions From Tolerances

§ 180.1001 Exemptions from the requirement of a tolerance.

(a) An exemption from a tolerance shall be granted when it appears that the total quantity of the pesticide chemical in or on all raw agricultural commodities for which it is useful under conditions of use currently prevailing or proposed will involve no hazard to the public health.

(b) When applied to growing crops, in accordance with good agricultural practice, the following pesticide chemicals are exempt from the requirement of a tolerance:

- (1) The following copper compounds: Bordeaux mixture, copper abietate, copper acetate, basic copper carbonate (malachite), copper hydroxide, copperlime mixtures, copper linoleate, copper oleate, copper oxochloride, copper silicate, copper sulfate basic, copper sulfate monohydrate, copper sulfate pentahydrate, copper-zinc chromate, cupric oxide, cuprous oxide, tetra copper calcium oxochloride. These copper compounds are used primarily as fungicides.
- (2) *N*-Octylbicyclo-(2,2,1)-5-heptene-2,3-dicarboximide.
- (3) Petroleum oils.
- (4) Piperonyl butoxide.
- (5) Piperonyl cyclonene.
- (6) *N*-Propyl isome.
- (7) Pyrethrum and pyrethrins.

- (8) Rotenone or derris or cube roots.
- (9) Ryania.
- (10) Sabadilla.

These pesticides are not exempted from the requirement of a tolerance when applied to a crop at the time of or after harvest.

(c) Residues of the following materials are exempted from the requirement of a tolerance when used in accordance with good agricultural practice as inert ingredients in pesticide formulations applied to growing crops or to raw agricultural commodities after harvest:

Inert ingredients	Limits	Uses
Acetic acid.....	Catalyst.
Acetone.....	Solvent, cosolvent.
Alkyl(C ₇ -C ₂₀) benzenesulfonic acid and its ammonium, calcium, magnesium, potassium, sodium, and zinc salts.	Surfactants, related adjuvants of surfactants.
α -Alkyl(C ₁₀ -C ₁₈)- ω -hydroxy-poly(oxyethylene); the poly(oxyethylene) content averages 3-20 moles.	Do.
α -Alkyl(C ₁₀ -C ₁₈)- ω -hydroxy-poly(oxyethylene) sulfates, ammonium, calcium, magnesium, potassium, sodium, and zinc salts; the poly(oxyethylene) content averages 3 moles.	Do.
α -(<i>p</i> -Alkylphenyl)- ω -hydroxy-poly(oxyethylene) produced by the condensation of 1 mole of alkylphenol (alkyl is a mixture of propylene tetramer and pentamer isomers and averages C ₁₀) with 6 moles of ethylene oxide.	Do.
Alkyl(C ₈ -C ₁₈) sulfate, ammonium, calcium, magnesium, potassium, sodium, and zinc salts.	Surfactant, suspending agent, dispersing agent.
Ammonium bicarbonate.	Intensifier when used with ammonium nitrate as desiccant or defoliant.
Ammonium chloride.	Solvent, cosolvent, neutralizer, solubilizing agent.
Ammonium hydroxide.	Surfactant.
Ammonium stearate	Intensifier when used with ammonium nitrate as desiccant or defoliant.
Ammonium thiosulfate.	Solvent, cosolvent, attractant.
Amyl acetate.....	Surfactant, adhesive.
Animal glue.....	Solid diluent, carrier.
Apple pomace.....	Solid diluent, carrier, thickener.
Attapulgite-type clay.	Solid diluent carrier.
Bentonite.....	Preservative for formulation.
Benzole acid.....	Surfactants, related adjuvants of surfactants.
α -Butyl- ω -hydroxypoly(oxypropylene) block polymer with poly(oxyethylene); molecular weight 2,400-3,500.	Solid diluent, carrier.
Calcareous shale.....	

Inert ingredients	Limits	Uses	Inert ingredients	Limits	Uses	Inert ingredients	Limits	Uses
Calcite		Solid diluent, carrier.	Guar gum		Surfactants, related	α -(p-Nonylphenyl)-		Surfactants, related,
Calcium carbonate		Do.			adjuvants of	ω -hydroxy-		adjuvants of
Calcium hydroxide		Solid diluent.	Gum arabic (acacia)		surfactants.	poly(oxyethylene)		surfactants.
Calcium oxide		Do.			Surfactant, suspend-	mixture of dihy-		
Calcium silicate		Solid diluent, carrier	Gypsum		ing agent, disper-	drogen phosphate		
Calcium stearate		Do.	Hydrochloric acid		ing agent.	and monohydro-		
Caseln		Surfactant, emulsi-			Solid diluent, carrier.	gen phosphate		
Castor oil, poly-		fier, wetting agent.	α -Hydro- ω -		Solvent, neutralizer.	esters and the		
oxyethylated; the		Surfactants, related	hydroxy-		Surfactants, related	corresponding		
poly(oxyethylene)		adjuvants of	hydroxy-		adjuvants of	ammonium, calci-		
content averages		surfactants.	poly-		surfactants.	um, magnesium,		
40 moles.			(oxyethylene);			um, monooethanol-		
Citric acid		Sequestrant.	molecular weight			amine, potassium,		
Cocoa shells		Solid diluent,	200-9,500 (as			sodium, and zinc		
		carrier.	defined in			salts of the phos-		
Cocoon oil		Surfactant, emulsi-	§ 121.2513 of this		Do.	phate esters; the		
		fier, wetting agent.	chapter).			nonyl group is a		
Coffee grounds		Surfactant, emulsi-	α -Hydro- ω -			propylene trimer		
		fier, wetting agent.	hydroxy-			isomer and the		
		Solid diluent,	(oxypropylene);			poly(oxyethylene)		
		carrier.	molecular weight			content averages		
		Do.	4,500.			4-14 moles.		
Corn cobs		Do.	Hydroxyethyl cel-		Do.			
Cornstarch		Do.	lulose.			α -(p-Nonylphenyl)-		Do.
Cottonseed oil		Safener.	Iron oxide		Solid diluent, carrier.	ω -hydroxy-		
Dextrin		Surfactant, suspend-	Kaolinite-type clay		Do.	poly(oxyethylene)		
		ing agent, disper-	Lauryl alcohol		Surfactant.	sulfate, ammo-		
		sing agent.	α -Lauryl- ω -		Surfactants, related	ni-um, calcium,		
		Solid diluent, carrier.	hydroxy-		adjuvants of	magnesium, potas-		
		Do.	poly-		surfactants.	sium, sodium, and		
Dextrose		Propellant.	sulfate, sodium			zinc salts;		
Diatomite (diato-		Do.	salt; the poly-			the nonyl group		
maceous earth)			(oxyethylene)			is a propylene		
Dichlorodifluoro-			content is 3-4			trimer isomer and		
methane			moles.			the poly(oxy-		
Dichlorotetrafluoro-			Licorice root		Surfactants, related	ethylene) content		
ethane			Lignosulfonate,		adjuvants of	averages 4 moles.		
Diethylene glycol		Surfactants, related	ammonium,		surfactants.	α -cis-9-Octadecenyl-		Do.
oleate		adjuvants of	calcium, magne-			hydroxy-		
Dipropylene glycol		surfactants.	sium, potassium,			poly(oxyethylene);		
Dsodium		Solvent, cosolvent.	sodium, and zinc			the octa-		
phosphate		Anticaking agent,	salts.			decenyl group is		
		conditioning	Magnesium carbo-		Anticaking agent,	derived from		
		agent.	nate.		conditioning agent.	oleyl alcohol and		
α -(p-Dodecylphenyl)-		Surfactants, related.	Magnesium		Safener.	the poly(oxy-		
yl)- ω -hydroxy-		adjuvants of	chloride.			ethylene) content		
poly(oxyethylene)		surfactants.	Magnesium lime			averages 20 moles.		
produced by the			Magnesium silicate			Oleic acid		Diluent.
condensation of			Magnesium sulfate			Oleic acid diester of		Surfactants, related
1 mole of dodecyl-			Methylcellulose			α -hydro- ω -		adjuvants of
phenol (dodecyl			Methyl chloride			hydroxy-		surfactants.
group is a propylene			Methyl ester of			poly(oxyethylene);		
trimer isomer) with			rosin, partially			the poly(oxyethylene)		
an average of 4-14			hydrogenated (as			having average		
or 30-70 moles of			defined in			molecular weight		
ethylene oxide; if a			§ 121.1050).			400.		
blend of products			Mica			Orange pomace		Solid diluent, carrier.
is used, the average			Molasses			Peanut shells		Do.
number of moles			Montmorillonite-			Petroleum hydrocar-		Solvent, diluent.
of ethylene oxide			type clay.			bons, light odorless		
reacted to produce			α -(p-Nonylphenyl)-			conforming to		
any product that			ω -hydroxy-			§ 121.1182 of this		
is a component of			poly(oxyethylene)			chapter.		
the blend shall be			produced by the			Petroleum hydro-		
in the range of 4-14			condensation of 1			carbons, synthetic		
or 30-70.			mole of nonyl-			isoparaffinic, con-		
Dolomite		Solid diluent, carrier.	phenol (nonyl			forming to § 121.1154		
Epoxidized linseed		Surfactants, related	group is a propyl-			of this chapter.		
oil		adjuvants of	ene trimer isomer)			Phosphoric acid		Buffer.
		surfactants.	with an average			Phosphorus oxy-		Catalyst.
		Do.	of 4-14 or 30-50			chloride.		
Epoxidized soybean			moles of ethylene			B-Pinene polymers		Surfactants related
oil			oxide; if a blend					adjuvants of
			of products is					surfactants.
Ethyl acetate		Solvent, cosolvent.	used, the average					
Ethylenediamine-	3% of pes-	Sequestrant.	number of moles					
tetraacetic acid,	ticide for-		of ethylene oxide					
	mulation.		reacted to pro-					
			duce any product					
Ethylenediamine-	8% of pes-	Do.	that is a compo-					
tetraacetic acid,	ticide for-		nent of the blend					
tetrasodium salt.	mulation.		shall be in the					
			range of 4-14 or					
Glycerol		Solvent, cosolvent.	30-90.					
Granite		Solid diluent, carrier.						

Inert ingredients	Limits	Uses
Cyclohexane		Do.
Cyclohexanone		Do.
A-(Di-sec-butylphenyl-poly(oxypropylene) block polymer with poly(oxyethylene); the poly(oxypropylene) content averages 4 moles, the poly(oxyethylene) content averages 5 to 12 moles, the molecular weight averages 600 to 900.		Surfactants, related adjuvants of surfactants.
Dioxane		Solvent, cosolvent.
Ethylene dichloride (1,2-dichloroethane)		Do.
Ethylene glycol mono-butyl ether		Do.
Ethyl methacrylate		Surfactants, related adjuvants of surfactants.
Formaldehyde	Not more than 1% of pesticide formulation.	Preservative for formulation.
Hexane (including isomeric hexanes)		Solvent, cosolvent.
Isopropyl alcohol		Solvent, cosolvent, stabilizer, inhibitor.
Methyl alcohol		Solvent, cosolvent.
Methyl ethyl ketone		Do.
Methyl isobutyl ketone		Do.
Methylene chloride (dichloromethane)		Do.
Methyl methacrylate		Surfactants, related adjuvants of surfactants.
Morpholine salt of dodecylbenzenesulfonic acid		Do.
Naphthalenesulfonic acid-formaldehyde condensate and its sodium salt		Do.
Paraformaldehyde	Not more than 1% of pesticide formulation as formaldehyde.	Preservative for formulation.
Polyoxyethylated sorbitol fatty acid esters; the polyoxyethylated sorbitol solution containing 15 percent water is reacted with fatty acids limited to C ₁₁ , C ₁₄ , C ₁₈ , and C ₂₂ , containing minor amounts of associated fatty acids; the poly(oxyethylene) content averages 30 moles.		Surfactants, related adjuvants of surfactants.
Sodium butyl naphthalenesulfonate		Do.
Sodium mono- and dimethylnaphthalenesulfonate; molecular weight 245-260.		Do.
Sodium mono-, di-, and trisopropyl-naphthalenesulfonate		Do.
Sodium salt of partially or completely saponified dark wood rosin (as defined in § 121.2502(a)(1)(v)).		Do.
Tetrasodium N-(1,2-dicarboxyethyl)-N-octadecylsulfosuccinamate		Do.
Toluene		Solvent, cosolvent.
Xylene		Do.

§ 180.1002 Allethrin (allyl homolog of cinerin I); exemption from the requirement of a tolerance.

The insecticide allethrin is exempted from the requirement of a tolerance for residues when used before harvest in the production of apples, beans, broccoli, brussels sprouts, cabbage, cauliflower, citrus, collards, horseradish, kale, kohlrabi, lettuce, mushrooms, mustard greens, peaches, pears, peppers, radishes, rutabagas, tomatoes, and turnips.

§ 180.1003 Ammonia; exemption from the requirement of a tolerance.

The fungicide ammonia is exempted from the requirement of a tolerance when used after harvest on the raw agricultural commodities grapefruit, lemons, and oranges.

§ 180.1004 Carbon disulfide; exemption from the requirement of a tolerance.

The insecticide carbon disulfide is exempted from the requirement of a tolerance for residues, when used as a fumigant after harvest for the following grains: Barley, corn, oats, popcorn, rice, rye, sorghum (milo), wheat.

§ 180.1005 Carbon tetrachloride; exemption from the requirement of a tolerance.

The insecticide carbon tetrachloride is exempted from the requirement of a tolerance for residues, when used as a fumigant after harvest for the following grains: Barley, corn, oats, popcorn, rice, rye, sorghum (milo), wheat.

§ 180.1006 Organic bromide residues from ethylene dibromide; exemption from the requirement of a tolerance.

The organic bromide residues are exempted from the requirement of a tolerance for residues when the insecticide ethylene dibromide is used as a fumigant after harvest for the following grains: Barley, corn, oats, popcorn, rice, rye, sorghum (milo), wheat.

§ 180.1007 Ethylene dichloride; exemption from the requirement of a tolerance.

The insecticide ethylene dichloride is exempted from the requirement of a tolerance for residues, when used as a fumigant after harvest for the following grains: Barley, corn, oats, popcorn, rice, rye, sorghum (milo), wheat.

§ 180.1008 Chloropicrin; exemption from the requirement of a tolerance.

The insecticide chloropicrin is exempted from the requirement of a tolerance for residues when used as a fumigant after harvest for the following grains: Barley, buckwheat, corn (including popcorn), oats, rice, rye, grain sorghum, wheat.

§ 180.1009 Chloroform; exemption from the requirement of a tolerance.

The insecticide chloroform is exempted from the requirement of a tolerance for residues, when used as a fumigant after harvest for the following grains: Barley, corn, oats, popcorn, rice, rye, sorghum (milo), wheat.

§ 180.1010 Methylene chloride; exemption from the requirement of a tolerance.

The insecticide methylene chloride is exempted from the requirement of a tolerance for residues when used as a fumigant after harvest for the following grains:

Barley, corn, oats, popcorn, rice, rye, sorghum (milo), wheat.

When used in the postharvest fumigation of citrus fruits.

§ 180.1011 Viable spores of the microorganism *Bacillus thuringiensis* Berliner; exemption from the requirement of a tolerance.

(a) For the purposes of this section the microbial insecticide for which exemption is being established shall have the following specifications:

(1) The microorganism shall be an authentic strain of *Bacillus thuringiensis* Berliner conforming to the morphological and biochemical characteristics of *Bacillus thuringiensis* as described in Bergey's Manual of Determinative Bacteriology, Seventh Edition.

(2) Spore preparations of *Bacillus thuringiensis* Berliner shall be produced by pure culture fermentation procedures with adequate control measures during production to detect any changes from the characteristics of the parent strain or contamination by other microorganisms.

(3) Each lot of spore preparation, prior to the addition of other materials, shall be tested by subcutaneous injection of at least 1 million spores into each of five laboratory test mice weighing 17 grams to 23 grams. Such test shall show no evidence of infection or injury in the test animals when observed for 7 days following injection.

(b) Exemption from the requirement of a tolerance is established for residues of the microbial insecticide *Bacillus thuringiensis* Berliner, as specified in paragraph (a) of this section, in or on the following raw agricultural commodities: Alfalfa, apples, artichokes, bananas, beans, broccoli, cabbage, cauliflower, celery, collards, cottonseed, cucumbers, eggplants, grapes, kale, lettuce, melons, mustard greens, oranges, potatoes, spinach, strawberries, sweet corn, tomatoes, and turnip greens.

§ 180.1012 1,1,1-Trichloroethane; exemption from the requirement of a tolerance.

The fungicide 1,1,1-trichloroethane is exempted from the requirement of a tolerance for residues when used in the postharvest fumigation of citrus fruits.

§ 180.1013 Sulfur dioxide from use in fumigants for stored grains; exemption from the requirement of a tolerance.

Residues from the use of sulfur dioxide in liquid grain-fumigant formulations for marker or fire-retardant purposes at levels not exceeding 5 percent by weight of such formulations are exempted from the requirement of a tolerance in or on barley, buckwheat, corn,

oats, popcorn, rice, rye, grain sorghum (milo), wheat.

§ 180.1014 Pentane; exemption from the requirement of a tolerance.

Pentane is exempted from the requirement of a tolerance for residues when used in accordance with good commercial practice as an adjuvant in liquid grain fumigants for the fumigation of the following grains: Barley, corn, oats, popcorn, rice, rye, sorghum (milo), wheat.

§ 180.1015 Sodium propionate; exemption from the requirement of a tolerance.

Sodium propionate is exempted from the requirement of a tolerance for residues when used as follows:

(a) As a fungicide in the production of garlic.

(b) For postharvest application as a preservative on salad greens and vegetables intended for consumption as salads.

§ 180.1016 Ethylene; exemption from the requirement of a tolerance.

Ethylene is exempted from the requirement of a tolerance for residues when used as a plant regulator on fruit and vegetable crops in conformity with good agricultural practice, before or after harvest.

§ 180.1017 Diatomaceous earth; exemption from the requirement of a tolerance.

Diatomaceous earth is exempted from the requirement of a tolerance for residues when used against insect pests in accordance with good agricultural practice on stored beans, peas, soybeans, and on the stored grains barley, buckwheat, corn, oats, rice, rye, sorghum (milo), wheat.

§ 180.1018 Ammonium nitrate; exemption from the requirement of a tolerance.

Ammonium nitrate is exempted from the requirement of a tolerance when used as a desiccant or defoliant in the production of cottonseed, grain sorghum, peppers, potatoes, sweetpotatoes.

§ 180.1019 Sulfuric acid; exemption from the requirement of a tolerance.

Sulfuric acid is exempted from the requirement of a tolerance for residues when used in accordance with good agricultural practice as a herbicide in the production of garlic and onions.

§ 180.1020 Sodium chlorate; exemption from the requirement of a tolerance.

Sodium chlorate is exempted from the requirement of a tolerance for residues in or on cottonseed when used in accordance with good agricultural practice as a defoliant, desiccant, or fungicide in cotton production.

SUBCHAPTER F—RADIATION PROGRAMS [RESERVED]

SUBCHAPTER G—NOISE ABATEMENT PROGRAMS [RESERVED]

[FR Doc.71-17201 Filed 11-24-71; 8:45 am]

Title 21—FOOD AND DRUGS

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

SUBCHAPTER C—DRUGS

[DESI 60105]

PART 141a—PENICILLIN AND PENICILLIN-CONTAINING DRUGS; TESTS AND METHODS OF ASSAY

PART 146a—CERTIFICATION OF PENICILLIN AND PENICILLIN-CONTAINING DRUGS

Order Revoking Provisions for Certification of Penicillin for Inhalation; Confirmation of Effective Date

An order was published in the FEDERAL REGISTER of September 3, 1971 (36 F.R. 17644), amending the antibiotic drug regulations to repeal provisions for certification of penicillin for inhalation. The order amended Parts 141a and 146a by revoking §§ 141a.28 and 146a.46 and all antibiotic certificates issued thereunder.

Pursuant to provisions of the Federal Food, Drug, and Cosmetic Act (secs. 502, 507, 52 Stat. 1050-51, as amended, 59 Stat. 463, as amended; 21 U.S.C. 352, 357) and under the authority delegated to the Commissioner of Food and Drugs (21 CFR 2.120), notice is given that no objections were filed to the above-identified order. Accordingly, the amendments promulgated thereby became effective October 13, 1971.

Firms affected by the order will be allowed 30 days after publication hereof in the FEDERAL REGISTER to recall outstanding stocks of the affected drugs. Certification of new stocks has been discontinued.

Dated: November 10, 1971.

SAM D. FINE,
Associate Commissioner
for Compliance.

[FR Doc.71-17224 Filed 11-24-71; 8:56 am]

[DESI 50260]

PART 141c—CHLORTETRACYCLINE (OR TETRACYCLINE) AND CHLORTETRACYCLINE- (OR TETRACYCLINE-)CONTAINING DRUGS; TESTS AND METHODS OF ASSAY

PART 146c—CERTIFICATION OF CHLORTETRACYCLINE (OR TETRACYCLINE) AND CHLORTETRACYCLINE- (OR TETRACYCLINE-)CONTAINING DRUGS

Repeal of Provisions for Certification of Demeclocycline Hydrochloride Topical Ointment; Confirmation of Effective Date

An order was published in the FEDERAL REGISTER of September 3, 1971 (36 F.R. 17645) amending the antibiotic drug reg-

ulations to repeal provisions for certification of demeclocycline hydrochloride topical ointment. The order amended Parts 141c and 146c by revoking §§ 141c.258 and 146c.258.

Pursuant to provisions of the Federal Food, Drug, and Cosmetic Act (secs. 502, 507, 52 Stat. 1050-51, as amended, 59 Stat. 463, as amended; 21 U.S.C. 352, 357) and under authority delegated to the Commissioner (21 CFR 2.120), notice is given that no objections were filed to the above-identified order. Accordingly the amendments promulgated thereby became effective October 13, 1971. Certification of new stocks has been discontinued.

Dated: November 10, 1971.

SAM D. FINE,
Associate Commissioner
for Compliance.

[FR Doc.71-17222 Filed 11-24-71; 8:56 am]

[DESI 50277]

PART 141c—CHLORTETRACYCLINE (OR TETRACYCLINE) AND CHLORTETRACYCLINE- (OR TETRACYCLINE-)CONTAINING DRUGS; TESTS AND METHODS OF ASSAY

PART 146c—CERTIFICATION OF CHLORTETRACYCLINE (OR TETRACYCLINE) AND CHLORTETRACYCLINE- (OR TETRACYCLINE-)CONTAINING DRUGS

Revocation of Provisions for Certification of a Combination Drug Containing Tetracycline With Vasoconstrictor and Hydrocortisone; Confirmation of Effective Date

An order was published in the FEDERAL REGISTER of August 8, 1971 (36 F.R. 14470), amending the antibiotic drug regulations to repeal provisions for certification of a combination drug containing tetracycline with vasoconstrictor and hydrocortisone. The order amended Parts 141c and 146c by revoking §§141c.-226 and 146c.226.

Pursuant to provisions of the Federal Food, Drug, and Cosmetic Act (Secs. 502, 507, 52 Stat. 1050-51, as amended, 59 Stat. 463, as amended; 21 U.S.C. 352, 357) and under authority delegated to the Commissioner of Food and Drugs (21 CFR 2.120), notice is given that no objections were filed to the above-identified order. Accordingly the amendments promulgated thereby became effective September 15, 1971.

Firms affected by the order will be allowed 30 days after publication hereof in the FEDERAL REGISTER to recall outstanding stocks of the affected drugs. Certification of new stocks has been discontinued.

Dated: November 10, 1971.

SAM D. FINE,
Associate Commissioner
for Compliance.

[FR Doc.71-17223 Filed 11-24-71; 8:56 am]

Chapter III—Environmental Protection Agency

REDESIGNATION AND REPUBLICATION

CROSS REFERENCE: For a document, affecting the changes described above, see Title 40, F.R. Doc. 71-17201, appearing in this issue.

Title 23—HIGHWAYS AND VEHICLES

Chapter II—Highway Safety Program Standards, Department of Transportation

PART 204—UNIFORM STANDARDS FOR STATE HIGHWAY SAFETY PROGRAMS

Revision of Standard and Miscellaneous Amendments

The Highway Safety Act of 1970 (Public Law 91-605) effected a legislative reorganization of those organizations within the Department of Transportation charged with the duty of carrying out the responsibilities of the Secretary of Transportation which are related to motor vehicle and traffic safety. Section 202 (a) and (b) of the Act abolished the National Highway Safety Bureau and established as its successor the National Highway Traffic Safety Administration as a separate operating administration within the Department of Transportation. The Act authorizes the Secretary to carry out through the Federal Highway Administration those provisions of the Highway Safety Act of 1966 for highway safety programs, research, and development relating to highway design, construction and maintenance, traffic control devices, identification and surveillance of accident locations, and highway-related aspects of pedestrian safety.

Highway Safety Program Standard No. 13, which is presently entitled "Traffic Control Devices", deals only slightly with traffic engineering services. Administration of the highway safety program has revealed a need to revise this standard to give greater emphasis to the importance of traffic engineering services in reducing the likelihood and severity of traffic accidents.

The purpose of these amendments is to retitle and revise Standard No. 13, and to reflect the division of responsibility relating to the administration of highway safety programs. In those highway safety program standards administered by the Federal Highway Administration, each reference to the National Highway Safety Bureau is therefore changed to "Federal Highway Administration." In addition, Standard No. 14, Pedestrian Safety, is amended to reflect the fact that this standard is jointly administered.

(Sec. 202, Highway Safety Act of 1970, Public Law 91-605, secs. 315, 401, and 402, Title 23,

U.S.C.; and delegations of authority at 49 CFR 1.48, 1.51, 36 F.R. 6570-71)

In consideration of the foregoing, 23 CFR 204.4 is amended as follows, effective upon publication in the FEDERAL REGISTER (11-25-71).

1. By amending the chapter heading of Chapter II to read as set forth above. § 204.4 [Amended]

2. Paragraph II of Highway Safety Program Standard No. 9 and paragraph II of Standard No. 12 are amended by changing the words "National Highway Safety Bureau" to "Federal Highway Administration".

3. Paragraph VII of Highway Safety Program Standard No. 14 is amended to read as follows:

"VII. This program shall be periodically evaluated by the States, and the National Highway Traffic Safety Administration and the Federal Highway Administration shall be provided with an evaluation summary."

4. Highway Safety Program Standard No. 13 is revised to read as follows:

HIGHWAY SAFETY PROGRAM STANDARD No. 13

TRAFFIC ENGINEERING SERVICES

Each State, in cooperation with its political subdivisions, and each Federal department or agency which controls highways open to public travel or supervises traffic operations, shall have a program for applying traffic engineering measures and techniques, including the use of traffic control devices, to reduce the number and severity of traffic accidents.

I. The program as a minimum shall consist of:

A. A comprehensive manpower development plan to provide the necessary traffic engineering capability, including:

1. Provisions for supplying traffic engineering assistance to those jurisdictions unable to justify a full-time traffic engineering staff.

2. Provisions for upgrading the skills of practicing traffic engineers, and providing basic instruction in traffic engineering techniques to subprofessionals and technicians.

B. Utilization of traffic engineering principles and expertise in the planning, design, construction, and maintenance of the public roadways, and in the application of traffic control devices.

C. A traffic control devices plan including:

1. An inventory of all traffic control devices.

2. Periodic review of existing traffic control devices, including a systematic upgrading of substandard devices to conform with standards issued or endorsed by the Federal Highway Administration.

3. A maintenance schedule adequate to insure proper operation and timely repair of control devices, including daytime and nighttime inspections.

4. Where appropriate, the application and evaluation of new ideas and con-

cepts in applying control devices and in the modification of existing devices to improve their effectiveness through controlled experimentation.

D. An implementation schedule to utilize traffic engineering manpower to:

1. Review road projects during the planning, design, and construction stages to detect and correct features that may lead to operational safety difficulties.

2. Install safety-related improvements as a part of routine maintenance and/or repair activities.

3. Correct conditions noted during routine operational surveillance of the roadway system to rapidly adjust for the changes in traffic and road characteristics as a means of reducing accident frequency or severity.

4. Conduct traffic engineering analyses of all high accident locations and development of corrective measures.

5. Analyze potentially hazardous locations, such as sharp curves, steep grades, and railroad grade crossings and develop appropriate countermeasures.

6. Identify traffic control needs and determine short and long range requirements.

7. Evaluate the effectiveness of specific traffic control measures in reducing the frequency and severity of traffic accidents.

8. Conduct traffic engineering studies to establish traffic regulations such as fixed or variable speed limits.

II. This Program shall be periodically evaluated by the State, or appropriate Federal department or agency where applicable, and the Federal Highway Administration shall be provided with an evaluation summary.

Issued in Washington, D.C., on November 19, 1971.

DOUGLAS W. TOMS,
National Highway Traffic
Safety Administrator.

F. C. TURNER,
Federal Highway Administrator.

[FR Doc. 71-17246 Filed 11-24-71; 8:52 am]

Title 32—NATIONAL DEFENSE

Chapter I—Office of the Secretary of Defense

SUBCHAPTER B—PERSONNEL; MILITARY AND CIVILIAN

PART 40—STANDARDS OF CONDUCT

Military Assistance Program

The following amendments to Part 40 have been authorized:

Paragraph (e) of § 40.735-5 has been amended and a new § 40.735-16 has been added as follows:

§ 40.735-5 *Gratuities.*

(e) Procedures with respect to Reserve Officer Training Corps Staff members are set forth in Part 92 of this subchapter.

§ 40.735-16 Military Assistance Program.

(a) Any retired member of the Armed Forces of the United States whose last active duty assignment was in a Military Assistance Advisory Group (as that term is defined in DOD Directive 5105.38, "Defense Security Assistance Agency (DSAA)," August 11, 1971¹ shall not accept employment for a 3-year period after the termination of such duty with the foreign government of the country where such duty was performed, except with the approval of the Secretary of the appropriate military department. This prohibition shall also apply to employment by a United States or foreign firm under contract with that foreign government if such employment involves the furnishing of personal services by such retiree directly to that foreign government.

(b) Procedures applicable to the above-listed retired members with respect to gifts and decorations from foreign governments are set forth in DOD Directive 1005.3, "Decorations and Gifts from Foreign Governments," September 16, 1967.²

MAURICE W. ROCHE,
Director, Correspondence and
Directives Division, OASD
(Comptroller).

[FR Doc.71-17241 Filed 11-24-71;8:51 am]

PART 49—ASSIGNMENTS OF MILITARY PERSONNEL TO DUTY IN DESIGNATED HOSTILE FIRE AREAS

Policy and Responsibilities

Part 49 has been revised as follows: Paragraph (a) of § 49.3 and paragraph (a) of § 49.4 have been amended as follows:

§ 49.3 Definitions.

(a) Family members include a husband and wife, or the father, mother, sons and daughters, and all sisters and brothers as defined in Title 37, United States Code 501(a) (2), (3), and (4).

§ 49.4 Policy and responsibilities.

(a) General. (1) Assignment to duty in a hostile fire area will be shared as equitably as practicable by all members of the Armed Forces, except under the following conditions:

(i) All designated hostile fire areas (a) Family deaths or disability (1) Where, as a result of serving in a designated hostile fire area, a member of a family is killed or dies or is determined by the Veterans Administration or one of the military services to be 100 percent physically or mentally disabled, and by virtue of such disability is hospitalized on a continuing basis and not gainfully employed, other members of the same family will, upon request, be exempt

from serving in Vietnam (as defined in § 49.3(b)) or other designated hostile fire areas, or, if serving in Vietnam or other designated hostile fire areas, be re-assigned therefrom.

(2) Family members will be similarly exempt, upon request, during a period in which another family member is in a captured or missing status.

(b) Age limitations. Military personnel who are under 18 years of age are not eligible for assignment to serve in a hostile fire area, but may be assigned to sea duty or to duty in other overseas areas.

(c) Sole surviving sons. Military personnel who are qualified sole surviving sons and who either have requested noncombat duty or have not waived a request submitted by a parent will be subject to the provisions of Part 52 of this subchapter.

(d) Conscientious objectors. The assignment of valid conscientious objectors shall be subject to the restrictions set forth in Part 75 of this subchapter.

(i) Vietnam only (a) Family service.

(1) Where one member of the Armed Forces is serving with a military unit in Vietnam, another member of the same family, upon his request, will be deferred from assignment to that country until completion of the first member's tour.

(2) Deferments are not authorized in those instances where a member is serving in Vietnam on temporary duty orders for a period of less than thirty (30) days.

(b) Wounded personnel reassignment.

(1) Wounded personnel who have been hospitalized 30 or more days outside Vietnam due to a specific hostile fire action resulting from service in Vietnam will not be returned to such service during the tour in which they are wounded. Personnel reassigned under this policy will be eligible for subsequent Vietnam tours, if needed, as are other personnel who have been credited with a tour in Vietnam. Personnel will be permitted to volunteer to return to Vietnam if they are medically qualified.

(2) This provision does not apply to personnel hospitalized due to injury, accident, or illness not attributable to hostile fire action. This precludes consideration of cases such as self-inflicted wounds and other noncombat causes.

(3) All military personnel being processed for assignment to a designated hostile fire area will be specifically advised of the special assignment considerations for family members outlined in subparagraph (1) of this paragraph.

MAURICE W. ROCHE,
Director, Correspondence and
Directives Division, OASD
(Comptroller).

[FR Doc.71-17242 Filed 11-24-71;8:51 am]

PART 52—SPECIAL ASSIGNMENT POLICIES FOR FAMILY MEMBERS

Sole Surviving Sons

Section 52.4(a)(2) (i) and (ii), and (3) (i) are amended to read as follows:

§ 52.4 Policy.

(a) Sole surviving sons. * * * (2) Discharges. (i) Enlisted personnel who become sole surviving sons subsequent to enlistment or induction may apply for and be granted an administrative discharge, except where the individual qualifies as a sole surviving son on the basis of a captured or missing-in-action status of a father, brother or sister (§ 52.3(a)(3)) and as precluded by subparagraph (3) (ii) of this paragraph.

(ii) Enlisted personnel who qualify as sole surviving sons on the basis of the 100 percent disability status of a father, brother or sister (§ 52.3(a)(4)) which occurred either prior to or subsequent to induction or enlistment may apply for and be granted an administrative discharge (see subparagraph (3) (ii) of this paragraph for members who have waived their status, but shall be required to complete at least 6 months of active duty prior to discharge in order to qualify for a veteran's exemption under the provisions of 50 App. U.S.C. 456(b)(3)).

(3) Waivers. (i) Where the parent(s) of a qualified sole surviving son request application on the protective assignment provisions of this policy on behalf of the member, the serviceman, himself, will be afforded the opportunity of waiving the parental request before a final determination is made.

MAURICE W. ROCHE,
Chief, Correspondence and
Directives Division, OASD
(Comptroller).

[FR Doc.71-17243 Filed 11-24-71;8:52 am]

PART 76—MOBILIZATION OF THE READY RESERVE

Applicability and Scope

Paragraph (d) of § 76.2 and paragraph (c) of § 76.3 have been amended as follows:

§ 76.2 Applicability and scope.

(d) The provisions of this part do not abrogate the policies, guidance or responsibilities established by DOD Directive 3025.12¹ and Part 185 of Subchapter G; however, whenever feasible and appropriate mobilization policies prescribed herein shall apply.

§ 76.3 Definitions.

(c) Full mobilization. Expansion of the active Armed Forces resulting from action by Congress and the President to mobilize all units in the existing approved force structure and all individual

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¹ Filed as part of the original. Copies available from U.S. Naval Publications and Forms Center, 5801 Tabor Avenue, Philadelphia, PA, Attention: Code 300

reservists, and the material resources needed for these units.

MAURICE W. ROCHE,
Director, Correspondence and
Directives Division, OASD
(Comptroller).

[FR Doc.71-17244 Filed 11-24-71;8:52 am]

PART 89—CIVILIAN PAY ALLOTMENTS

Allotments for Foreign Nationals

1. Paragraphs (a) (2), (c) and (e) (8) of § 89.3 have been revised as follows:

§ 89.3 Policy.

(a) * * *

(2) Allotments for purposes described in paragraph (e) (7), (8), and (9) of this section may be made by DOD employees who meet the eligibility requirements specified in Treasury Fiscal Requirements Manual for Guidance of Departments and Agencies (Part III, Chapter 4000), DOD Directive 1426.1, DOD Directive 5035.1, "Fund-Raising within DOD," and DOD Instruction 5035.5, "DOD Overseas Combined Federal Fund-Raising Campaign".

(c) *Allotments for foreign nationals.* Foreign nationals employed by DOD and working outside of their own country on assignments of three or more months' duration may be permitted to make allotments for any of the purposes authorized in paragraph (e) of this section, providing all other provisions of this part are observed. Foreign nationals employed by DOD to work in their own countries, or in the Canal Zone, may be permitted to make allotments for the purposes shown in paragraph (e) (5) and (8) of this section and to pay premiums on group health benefits and group life insurance. In addition, foreign nationals may be permitted to make other allotments from pay when based on local customs and practices or pursuant to treaties or country-to-country agreements.

(e) *Purpose of allotment.* * * *

(8) Payment of employee organization dues as authorized by DOD Directive 1426.1.²

MAURICE W. ROCHE,
Director, Correspondence and
Directives Division, OASD
(Comptroller).

[FR Doc.71-17240 Filed 11-24-71;8:51 am]

[DOD Directive 1205.14]¹

PART 103—ENLISTMENT, APPOINTMENT, AND ASSIGNMENT OF INDIVIDUALS IN RESERVE COMPONENTS

OCTOBER 19, 1971.

The Deputy Secretary of Defense approved the following revision to Part 103:

¹ Filed as part of original.

² Filed as part of original. Copies available from the U.S. Naval Publications and Forms Center, 5901 Tabor Avenue, Philadelphia, PA 19120, Attention: Code 300.

Sec.

103.1 Purpose and applicability.
103.2 Policy.

AUTHORITY: The provisions of this Part 103 issued under 10 U.S.C. 510, 10 U.S.C. 511; sec. 301, 80 Stat. 379; 5 U.S.C. 301.

§ 103.1 Purpose and applicability.

This part provides standards, procedures, and priority guidelines for enlistment, assignment or appointment of individuals in units of the Reserve Components of the Military Departments.

§ 103.2 Policy.

(a) Physical and mental standards for male personnel enlisted in the basic enlistment pay grade will not be higher than those prescribed by the Military Selective Service Act of 1967, or DOD Directive 1145.1, "Qualitative Distribution of Military Manpower," September 13, 1967,² which establish minimum standards for acceptability into the regular services. Higher physical and mental standards may be specified by the appropriate Secretary of a Military Department for initial enlistment in a grade higher than the basic enlistment pay grade or for enlistment in a program leading to a commission.

(b) The appropriate Secretary shall, except as otherwise provided by law, prescribe physical, mental, moral, academic attainment, professional and age qualifications for appointment of reserve members of the Armed Forces of the United States.

(c) The enlistment of individuals under the provisions of section 511(a) or 511(d) of title 10, United States Code, and the assignment of applicants to units of the Ready Reserve shall normally be in accordance with the order of priorities listed below. Applicants in categories (1) through (6) may be enlisted without regard to their date of application. Non-prior service applicants in category (7) who are accepted on reserve unit enlistment waiting lists will be retained in their original priority. However, exceptions to these policies may be made when, in the best judgment of those responsible for the procurement of reserve personnel, an applicant's prior military service or significant civilian training or experience in the occupational skill concerned is considered to warrant it. In such cases, notation as to the basis of the exception shall be made in the individual's service record.

(1) Members of the Selected Reserve who desire to reenlist.

(2) Members of Selected Reserve units applying for transfer from another locality.

(3) Members of the Selected Reserve who were relieved from assignment to units due to reorganization, inactivation, or relocation of their units.

(4) Members of the Ready Reserve Pool.

(5) Prior service applicants.

(6) Nonprior service individuals who have not undergone random selection for induction (includes all qualified female nonprior service applicants), or who have undergone random selection for induction and have passed through their full year of vulnerability without induction.

(7) Nonprior service individuals who have undergone random selection for induction but have not yet passed through their full year of vulnerability.

(d) In conjunction with the policies in paragraph (c) of this section, the Secretaries of the Military Departments will require their Reserve Components to actively recruit qualified individuals of all races, creeds, and ethnic groups toward the end that all units shall generally reflect the character of the population in the unit's recruiting area.

(e) Prior to enlisting a draft-liable individual in one of the Reserve Components, the applicant shall be required to sign a written statement to the effect that he has not received orders to report for induction, that any subsequent receipt of such orders will be reported to his unit commander, and that he understands he is subject to an induction order if issued before he enlists.

(1) An individual who enlists in a Reserve Component and who subsequently receives orders to report for induction, the issuing date of which precedes his date of enlistment, shall be discharged from his Reserve Component for the purpose of induction into the Armed Forces.

(2) The discharge should be effected concurrently with the induction so as to continue the individual's military obligation consistent with § 50.2(d) of this title.

(3) The date of issuance of orders to report for induction shall be considered to be the date of mailing of such orders by appropriate authority in the Selective Service System.

(f) Individual applicants for assignment or enlistment in the Reserve Components shall not be accepted unless there is reasonable assurance that they will be available and able to participate satisfactorily in the unit concerned. In this respect careful consideration shall be given to the geographical location, future plans, and possible conflicts with the civilian occupation of the individual applicant. Individuals who are engaged in or preparing for a skill listed in the Department of Labor "List of Critical Occupations for Screening the Ready Reserve" shall not be enlisted unless there is an overriding military necessity for their skill consistent with Part 125 of this title.

(g) Reserve members who have enlisted under the provisions of section 511(d) of title 10, U.S.C., and who thereafter incur either a bona fide temporary, nonmilitary obligation requiring overseas residency outside the United States, or a bona fide, temporary, religious missionary obligation which would conflict with their required participation in reserve training, may, upon their request, be reenlisted under the provisions of section 511(a) of title 10, U.S.C. Requests under the provisions of this subsection, except those from members who incur a legitimate religious missionary obligation, will be approved by the Secretary of the Military Department concerned. Requests from members based on a religious missionary obligation may be approved by the local National Guard or Reserve Component Commander. Approval of all

PART 14-1—GENERAL

Subpart 14-1.4—Procurement Responsibility and Authority

§ 14-1.451-1 [Revised]

1. This section is revised by deletion of the word hereby immediately preceding the word delegated.

§ 14-1.451-5 [Deleted]

2. Subpart 14-1.4 is hereby amended by the deletion of § 14-1.451-5.

3. Part 14-1 is amended by the addition of Subpart 14-1.12 and §§ 14-1.1204 and 14-1.1204-1.

Subpart 14-1.12—Responsible Prospective Contractors

Sec.

14-1.1204 Determination of responsibility or nonresponsibility.
14-1.1204-1 Requirement.

AUTHORITY: The provision of this Subpart 14-1.12 issued under section 205(c), 63 Stat. 390, 40 U.S.C. 486(c).

Subpart 14-1.12—Responsible Prospective Contractors

§ 14-1.1204 Determination of responsibility or nonresponsibility.

§ 14-1.1204-1 Requirement.

The signing of a contract by the contracting officer shall satisfy the requirements of § 1-1.1204-1(a) of this title for making and documenting an affirmative determination that the prospective contractor is responsible with respect to that contract.

PART 14-3—PROCUREMENT BY NEGOTIATION

Subpart 14-3.2—Circumstances Permitting Negotiation

1. Section 14-3.201 is revised to read as follows:

§ 14-3.201 National emergency.

(a) *Determination.* It is determined by the Secretary that contracts or purchases negotiated under § 1-3.201(b) of this title during the national emergency which exists by reason of Presidential Proclamation No. 2914 of December 16, 1950 (3 CFR) are in the public interest.

(b) *Application.* Contracts in excess of \$100,000, negotiated under § 1-3.201(c) (1) of this title shall be submitted to the Secretary for approval prior to execution by the contracting officer. Contracts over \$25,000 and not in excess of \$100,000 may be approved by the heads of bureaus or offices but this responsibility may not be re delegated.

PART 14-7—CONTRACT CLAUSES

Subpart 14-7.6—Fixed-Price Construction Contracts

1. Section 14-7.602-50(5) is amended as follows:

§ 14-7.602-50(5) Safety and health.

In the interest of uniform practice, each bureau and office shall include in every construction contract exceeding \$2,000 a safety and health clause similar

to the one given below, containing, as a minimum, those requirements set forth therein. Additional safety requirements may be added to cover special circumstances.

SAFETY AND HEALTH

(a) The Contractor shall not require any laborer or mechanic employed in the performance of the contract to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health or safety, as determined under construction safety and health standards promulgated by regulations of the Secretary of Labor.

(b) The Contractor shall comply with the Department of Labor Safety and Health Regulations for Construction promulgated under section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327 et seq.).

(c) If the Contractor fails or refuses to promptly comply with the requirements of this clause, the Contracting Officer, or his authorized representative, shall notify the Contractor of any noncompliance and indicate to the Contractor the action to be taken. The Contractor shall, after receipt of such notice, immediately correct the conditions to which attention has been directed. Such notice, either oral or written, when served on the Contractor or his authorized representative(s) at the site of the work, shall be deemed sufficient.

(d) In the event the Contractor fails or refuses to promptly comply with the compliance directive issued under subparagraph (c) above, the Contracting Officer or his authorized representative may issue an order to suspend all or any part of the work. When satisfactory corrective action is taken, an order to resume work will be issued. The Contractor shall not be entitled to any extension of time, nor to any claim for damage or to excess costs by reason of either the directive or the suspension order. Failure of the Contracting Officer or his authorized representative to order discontinuance of any or all of the Contractor's operations shall not relieve the Contractor of his responsibility for the safety of personnel and property.

(e) The Contractor shall maintain an accurate record of, and shall report to the Contracting Officer in the manner prescribed by the Contracting Officer, all cases of death, occupational diseases, traumatic injury to employees or the public involved, and property damage by accident in excess of \$100 incident to performance of work under this contract.

(f) The rights and remedies of the Government provided in this clause are in addition to any other rights and remedies provided by law or under this contract.

(g) In event there is a conflict between the requirements of this clause and any requirement of the U.S. Department of Labor in its regulation of the Construction Safety Act, the more stringent requirement will prevail.

PART 14-10—BONDS AND INSURANCE

Subpart 14-10.1—Bonds

§ 14-10.109 Execution and administration of bonds.

1. The title of § 14-10.109 as set forth above is inserted immediately preceding § 14-10.109-50 Additional requirements respecting bonds.

[FR Doc.71-17211 Filed 11-24-71;8:49 am]

such requests are subject to the following requirements:

(1) Certification of the obligation is made by the employer, sponsor, or recognized church body as appropriate.

(2) Reserve members concerned have completed their initial period of active-duty-for-training.

(3) The approving authority concerned is satisfied that the request is bona fide.

(4) Reenlistment contracts for such individuals will include an agreement to serve for a period of time which will include the period of temporary, nonmilitary obligation (not to exceed 30 months) plus the remaining obligatory military service remaining under the original enlistment contract. Such reenlistment contracts will assure that each individual will serve a total of six (6) years of reserve service as required by law.

(5) The individual reservists concerned will be carried as members of the inactive National Guard or the Ready Reserve Pool, as appropriate, during the period of nonmilitary obligation, and as such, will be subject to being involuntarily ordered to active duty as authorized by law (see paragraph IV.C.2 of DOD Directive 1215.13, "Unsatisfactory Performance of Ready Reserve Obligation," October 12, 1970.)

MAURICE W. ROCHE,
Director, Correspondence and Directives Division, OASD (Comptroller).

[FR Doc.71-17267 Filed 11-24-71;8:53 am]

Title 41—PUBLIC CONTRACTS AND PROPERTY MANAGEMENT

Chapter 14—Department of the Interior

MISCELLANEOUS AMENDMENTS TO CHAPTER

Pursuant to the authority of the Secretary of the Interior, contained in 5 U.S.C. 301, Parts 14-1, 14-3, 14-7, and 14-10 of Chapter 14, Title 41 of the Code of Federal Regulations are hereby amended as set forth below.

It is the general policy of the Department of the Interior to allow time for interested parties to take part in the rule making process. However, the amendments and revisions contained herein are minor and entirely administrative in nature. Therefore, the public rule making process is waived and these changes will become effective upon publication in the FEDERAL REGISTER (11-25-71).

WARREN F. BRECHT,
Deputy Assistant Secretary of the Interior.

NOVEMBER 19, 1971.

¹ Filed as part of original. Copies available from the U.S. Naval Publications and Forms Center, 5801 Tabor Avenue, Philadelphia, PA 19120, Attention: Code 300.

Title 42—PUBLIC HEALTH

Chapter IV—Environmental Protection Agency

REDESIGNATION AND REPUBLICATION

CROSS REFERENCE: For a document affecting the changes described above, see Title 40, F.R. Doc. 71-17201, appearing in this issue.

Title 46—SHIPPING

Chapter IV—Federal Maritime Commission

SUBCHAPTER B—REGULATIONS AFFECTING MARITIME CARRIERS AND RELATED ACTIVITIES

[Docket No. 71-63; General Order 11, Amdt. 1]

PART 512—REPORTS OF RATE BASE AND INCOME ACCOUNT BY VESSEL OPERATING COMMON CARRIERS IN THE DOMESTIC OFFSHORE TRADES

General Requirements

On June 5, 1971, the Federal Maritime Commission published in the *FEDERAL REGISTER* (36 F.R. 10985) a notice of proposed rule making, wherein an amendment to 46 CFR Part 512 was proposed. The regulations contained in 46 CFR Part 512 are for the purpose of requiring the filing of additional information by common carriers by water subject to the Commission's General Order No. 5 (46 CFR Part 511) to enable the Commission to expedite the discharge of its duties under the Shipping Act, 1916, and the Intercoastal Shipping Act, 1933.

The purpose of the amendment is the enhancement of the usefulness of General Order 11 (46 CFR Part 512) by dispensing with the filing of statements and data required for the first 6 months of each year, and requiring in lieu thereof the filing of financial and operating data in support of initial, new or changed tariff rates at the same time that such initial, new or changed tariff rates are themselves filed with the FMC.

It was pointed out in the notice that failure to furnish the above financial and operating data certified, as required by 46 CFR 512.4, simultaneously with initial, new or changed tariff rates, may leave the Commission with no alternative other than to suspend such rates for a part or all of the 4-month period authorized by section 3 of the Intercoastal Shipping Act, 1933.

Written comments on the proposed amendment were invited and received from interested parties. The Commission has carefully considered the comments which were submitted and are on file with the Commission. Certain of these comments have been adopted or substantially satisfied by editorial changes, deletions from, or additions to the amendment. These and other comments are discussed hereinbelow.

Several commentators offered changes which they felt were necessitated by the time frame set forth for the financial reports. The adopted amendment incorporates in part some of these suggestions by providing that the reports cover a 12-month period ending not more than 60 days prior to the date of filing the initial, new or changed rates.

Another suggestion offered was to allow 150 days in which to prepare the justifications, or in the alternative to allow the latest General Order 11 report to be substituted, rather than allowing the 60 days suggested by Hearing Counsel.

Hearing Counsel's suggestion extended the original rule which allowed for only 30 days. We find that unless the information is current, i.e., not more than 60 days old, it will be of little value to the Commission's Bureau of Financial Analysis. The Bureau has felt it necessary to require that the 3 percent gross revenue requirement be based upon gross revenue as of the 12-month period ending not more than 60 days prior to filing of the rate adjustment. To utilize the latest annual General Order 11 report as suggested by these carriers would render the desired information valueless for purposes of financial analysis.

The proposed amendment was also criticized for failing to specify how the 3 percent of gross revenue is to be determined. This is remedied by providing that the determination of gross revenue is to be made for that 12-month period ending not more than 60 days prior to the date of filing the initial, new or changed rates.

In § 512.3(d) (1) (i), the word "and" has been added to make the phrase "increase and/or decrease". The purpose of this is to clarify the effect of a simultaneous increase and decrease of tariff items. Thus, for example, if 35 percent of a carrier's domestic offshore tariff items were increased by 3 percent or more and simultaneously 20 percent of that carrier's domestic offshore tariff items were decreased by 3 percent or more, the cumulative effect is an increase and decrease of 55 percent which would bring this particular change within the rule.

Finally, a new paragraph, (d) (5), has been added to provide for a certification to be filed along with every changed rate filed which does not meet the tests set forth in (d) (1) (i) or (ii). This certification will state that since the changed rate does not meet the criteria set out in (d) (1) (i) and (ii), the financial and operating data set forth in subparagraphs (2) and (3) are unnecessary.

Other comments include:

1. The argument that the rule "purports to impose on the carriers, contrary to law, the burden of coming forward with evidence that proposed rates are lawful." This is attributed to the statement in the notice of proposed rule making that, "Failure to furnish the financial and operating data * * * may leave the Commission with no alternative other than to suspend such rates * * *." This argument is not valid since the decision as to whether or not to suspend a proposed rate change is nec-

essarily made on the basis of financial information filed with the Commission by the regulated carrier. The absence of current financial data on the occasion of a major rate change, it is readily apparent, would indeed be a hindrance to the Commission in the exercise of its discretionary power to suspend, when the effects of that rate change may be permanent and widespread.

2. The contention that the furnishing of financial and operating data is meant to be wholly on a voluntary basis. We must emphasize that the Commission is authorized to require the filing of financial data pursuant to authority granted to the Commission by sections 18, 21, and 43 of the Shipping Act, 1916, and sections 2 and 3 of the Intercoastal Shipping Act, 1933.

3. The claim that the proposed rule imposes a burden upon office procedures, since schedules would have to be prepared on other than a financial year basis. Hearing Counsel contend that this argument is without merit since the schedules required are no more burdensome than the 6-month report, which under the old rule was required unless there was no substantial change in the carrier's operations. In the case of a major rate change, there would be such "substantial change" which would add only the projections required by the new rule. We agree with Hearing Counsel's position that the information required would be on hand since, in deciding whether a major rate change is necessary, a carrier would have to compute data similar to that required by the proposed rules. The additional requirement is simply the translation of that data into General Order 11 terms.

4. The State of Hawaii's Petition for Leave to Intervene which, along with its comments, is based on the misconception that the requirement for filing annual General Order 11 reports will be eliminated. It is abundantly clear that the proposed rules do not purport to eliminate the annual General Order 11 reports required by 46 CFR 512.3(a), but only those required by 46 CFR 512.3(d), the 6-month General Order 11 reports. In their place would be substituted the requirement for filing current financial data at the time of filing a major rate increase.

Pursuant to sections 18, 21, and 43 of the Shipping Act, 1916 (46 U.S.C. 817, 820 and 841(a)) and sections 2, 4, and 7 of the Intercoastal Shipping Act, 1933 (46 U.S.C. 844, 845(a), and 847), paragraph (d) of § 512.3, Title 46 CFR, Chapter IV, Part 512 is amended to read as follows:

§ 512.3 General requirements.

(d) (1) Whenever a carrier files with the Federal Maritime Commission a tariff or tariffs containing initial rates, new rates, or changed rates which will (i) increase and/or decrease 50 percent or more of its domestic offshore tariff items by 3 percent or more, or (ii) increase or decrease its domestic offshore gross revenue by 3 percent or more, per trade, it shall file simultaneously therewith financial and operating data as

indicated in subparagraphs (2) and (3) of this paragraph. For purposes of this paragraph, gross revenue shall be for the 12-month period ending not more than 60 days prior to the date of filing the initial, new, or changed rates with the Commission.

(2) Exhibit A's (of the nature required by § 512.7(b)), in duplicate, for a 12-month period ending not more than 60 days prior to the date of filing the initial, new, or changed rates with the Commission; and for a 12-month period beginning with the month following the month in which the initial, new, or changed rates are proposed to become effective (the latter mentioned Exhibit A will have to be constructed, and should be predicated on the very best estimates that it is possible for the carrier to make).

(3) Exhibit B's (of the nature required by § 512.7(c)), in duplicate, supported by schedules similar to those normally required by the annual filings covering a 12-month period coinciding with the period covered by the Exhibit A mentioned in subparagraph (2) of this paragraph (this requirement applies only with respect to changed rates—it does not apply to initial or new rates); and for a constructed 12-month period (taking into account the effect of proposed rate changes) commencing with the month following the month in which the changed rates are proposed to become effective.

(4) If a carrier files initial, new, or changed rates within 90 days of the end of its financial year, it may, at its option, furnish its annual General Order 11 report, in duplicate, for that year in lieu of the schedules of actual data required in subparagraphs (2) and (3) of this paragraph. The requirement to furnish schedules pertaining to future operations under the proposed new rates would not be affected by this substitution.

(5) When a changed rate is filed which does not meet the criteria set forth in subdivisions (i) and (ii) of subparagraph (1) of this paragraph, the following certification must be submitted with the changed rate.

CERTIFICATION

I, the undersigned _____
(type or print name and
title of officer in charge
of accounts)

of _____ certify
(full name of reporting company)
that the changed rate submitted herewith
does not meet the criteria set forth in 46
CFR 512.3(d)(1) (i) and (ii), and for that
reason no financial and operating data as
set forth in subparagraphs (2) and (3) of
§ 512.3(d) are necessary.

Signature _____ Date _____, 19__

(Secs. 18, 21, 43, Shipping Act, 1916; 46 U.S.C. 817, 820, 841(a); secs. 2, 4, 7, Intercoastal Shipping Act, 1933; 46 U.S.C. 844, 845(a), 847)

These rules shall become effective 30 days from date of publication in the FEDERAL REGISTER, pursuant to section 4(c) of the Administrative Procedure Act (5 U.S.C. 553).

By the Commission.

[SEAL] FRANCIS C. HURNEY,
Secretary.
[FR Doc.71-17255 Filed 11-24-71;8:52 am]

Title 47—TELECOMMUNICATION

Chapter I—Federal Communications Commission

[Docket No. 19116]

PART 73—RADIO BROADCAST SERVICES

FM Broadcast Stations in the Upper New England Area; Correction

In the matter of amendment of § 73.202, Table of assignments, FM broadcast stations (Skowhegan, Augusta, Westbrook, and South Paris, Maine; Plymouth and Dover, N.H.; Waterbury, Vt.; and Plattsburgh, N.Y.), Docket No. 19116, RM-1442, RM-1464.

In the Commission's Report and Order, FCC 71-1159, in the above-entitled proceeding, adopted November 10, 1971, published in the FEDERAL REGISTER on November 18, 1971, 36 F.R. 21996, the channel reference in paragraph 19(c), page 11, is corrected in line 1 to read "288A" and in line 11 to read "224A".

Released: November 19, 1971.

FEDERAL COMMUNICATIONS
COMMISSION,
[SEAL] BEN F. WAPLE,
Secretary.

[FR Doc.71-17258 Filed 11-24-71;8:53 am]

Title 49—TRANSPORTATION

Chapter X—Interstate Commerce Commission

SUBCHAPTER A—GENERAL RULES AND REGULATIONS

[Ex Parte No. MC-19; Sub-No. 14]

PART 1056—TRANSPORTATION OF HOUSEHOLD GOODS IN INTERSTATE OR FOREIGN COMMERCE

Practices of Motor Common Carriers of Household Goods; Reweighing of Shipments

Order. At a general session of the Interstate Commerce Commission, held at its office in Washington, D.C., on the 9th day of November 1971.

It appearing that on the Commission's own motion a rule making proceeding was initiated on February 3, 1971 (36 F.R. 3432) to determine whether it would be in the public interest to modify and revise 49 CFR 1056.6(d) and 1056.7 so as to allow a carrier charge for the reweighing of shipments of household goods only in certain circumstances:

It further appearing that investigation of the matters and things involved in these proceedings has been made and that the Commission has made and filed its report 114 M.C.C. herein containing its findings of facts and conclusions

thereon, which report is hereby referred to and made a part hereof;

It is ordered, That § 1056.6(d) and § 1056.7 of part 1056 of Chapter X of Title 49 of the Code of Federal Regulations, Transportation of Household Goods in Interstate or Foreign Commerce, be, and they are hereby, modified and revised in the following manner:

(1) Modify the last sentence of 49 CFR 1056.6(d) to read as follows:

§ 1056.6 Determination of weights.

*** The carrier may publish in its tariff a reasonable charge for reweighing shipments, which charge shall not be applicable when (1) the reweigh net weight is more than 120 pounds below the billed net weight, or (2) the billed net weight exceeds by 25 percent or more the estimated weight shown on the Estimate of Charges for Transportation provided pursuant to § 1056.8.

(2) Revise Form BOP 103, Summary of Information for Shippers of Household Goods, 49 CFR 1056.7, the chapter entitled "How Do I Know the Weight of My Shipment?", by striking the words "at your expense" from the next-to-the-last sentence and adding the following sentences at the end of the last paragraph:

Because of physical limits in mechanical weighing devices, the billing weights, upon which your shipping charges are based, may be approximate. You may request that your shipment be reweighed, and the carrier may publish in its tariff a reasonable charge for reweighing shipments. This charge shall not be applicable when (1) the reweigh net weight is more than 120 pounds below the billed net weight, or (2) the billed net weight exceeds by 25 percent or more the estimated net weight shown on the Estimate of Charges for Transportation provided pursuant to § 1056.8 of these regulations.

It is further ordered, That the amendments specified in the next preceding paragraph be, and they are hereby, prescribed to become effective January 1, 1972, and will apply only on household goods removed from the shipper's premises on and after the said effective date.

And it is further ordered, That notice of this order shall be given to the general public by depositing a copy thereof in the Office of the Secretary of the Commission at Washington, D.C., and by filing a copy with the Director, Office of the Federal Register.

By the Commission.

[SEAL] ROBERT L. OSWALD,
Secretary.

[FR Doc.71-17293 Filed 11-24-71;8:56 am]

[No. MC-C-6748]

PART 1061—LIMITATION OF SMOKING ON INTERSTATE PASSENGER CARRIER VEHICLES

Order. At a general session of the Interstate Commerce Commission, held at its office in Washington, D.C., on the 8th day of November 1971.

It appearing that by petition filed January 8, 1970, Ralph Nader sought the institution of a rule making proceeding for the purpose of establishing a rule or regulation of general applicability for passenger-carrying motor vehicles operating in interstate or foreign commerce, prohibiting the smoking of cigars, cigarettes, and pipes by passengers or operating personnel on all such motor vehicles, whereupon the petition was published in the FEDERAL REGISTER on February 14, 1970 (35 F.R. 3053), with provision for the filing of representations, views, and arguments in support of, or in opposition to the petition;

It further appearing that various parties submitted their views and arguments regarding the petition, and that subsequently this rule making proceeding was instituted by order of August 7, 1970, and an oral hearing was held in the above-entitled proceeding on October 5, 1970, at Washington, D.C.;

It further appearing that by report and recommended order served February 8, 1971, the examiner recommended the promulgation of a regulation requiring common carriers of passengers, in interstate or foreign commerce, essentially to display a notice requesting "no smoking" on a voluntary basis, and that exceptions and replies thereto have been filed;

And it further appearing that investigation of the matters and things involved in this proceeding has been made and that the Commission has made and filed its report herein containing its findings of fact and conclusions thereon, which report is hereby referred to and made a part hereof:

It is ordered, That Subchapter A of Chapter X of Title 49 of the Code of Federal Regulations be, and it is hereby, amended by adding thereto a new Part 106.1 Limitation of smoking on interstate passenger carrier vehicles as set forth below.

It is further ordered, That the said petition in all other respects be, and it is hereby denied.

It is further ordered, That this order shall become effective on January 6, 1972, and shall remain in effect until modified or revoked in whole or in part by further order of the Commission.

And it is further ordered, That notice of this order shall be given to the general public by depositing a copy thereof in the Office of the Secretary of the Commission at Washington, D.C., and by filing a copy with the Director, Office of the Federal Register.

(Sections 202, 204, 208, 216, 49 Stat. 543, 546, 552, and 558, all as amended; 49 U.S.C. 302, 304, 308, 316.)

By the Commission.

[SEAL] ROBERT L. OSWALD,
Secretary.

§ 106.1 Provision for separate seating for smokers and nonsmokers on interstate passenger carriers by motor vehicle.

(a) All motor common carriers of passengers subject to part II of the In-

terstate Commerce Act, which desire to permit smoking of cigars, cigarettes, or pipes, shall, where smoking on passenger-carrying motor vehicles is otherwise permitted by law, provide a smoking section, consisting of a number of seats in the rear of the passenger-carrying motor vehicle, not to exceed 20 percent of the capacity of the said vehicle. Except as otherwise permitted under paragraph (b) of this section, smoking of cigars, cigarettes, or pipes shall not be permitted in any portion of the motor vehicle other than the smoking section required by subparagraph (1) of this paragraph.

(b) The provisions of paragraph (a) of this section shall not be construed to apply to charter operations performed by motor common carriers of passengers subject to part II of the Interstate Commerce Act.

(c) In the event of any unusual circumstances arising under paragraph (a) of this section, the operator (driver) of the motor vehicle involved (or other carrier employee) may exercise reasonable discretion to the extent permitted by the carrier, by making minor modifications in the special seating sections established by paragraph (a) of this section in order to assure the comfort of all passengers and the provisions of safe, adequate, and expeditious transportation service.

[FR Doc.71-17294 Filed 11-24-71;8:57 am]

Title 50—WILDLIFE AND FISHERIES

Chapter I—Bureau of Sport Fisheries and Wildlife, Fish and Wildlife Service, Department of the Interior

PART 32—HUNTING

Monte Vista National Wildlife Refuge, Colo.

The following special regulation is issued and is effective on date of publication in the FEDERAL REGISTER. (11-25-71).

§ 32.22 Special regulations: upland game; for individual wildlife refuge areas.

COLORADO

MONTE VISTA NATIONAL WILDLIFE REFUGE

Archery hunting of pheasants, rabbits, skunk, badger, raccoon, coyote, bobcat, feral cat, magpie, and crow on the Monte Vista National Wildlife Refuge, Colo., is permitted only on the area designated by signs or maps as open to hunting. This open area, comprising 2,865 acres, is delineated on maps available at refuge headquarters, Monte Vista, Colo., and from the Regional Director, Bureau of Sport Fisheries and Wildlife, Post Office Box 1306, Albuquerque, NM 87103.

Archery hunting shall be in accordance with all applicable State regulations governing the hunting of pheasants, rabbits, skunk, badger, raccoon, coyote, bobcat, feral cat, magpie, and crow subject to the following special conditions:

(1) The archery hunting season on the refuge extends from November 27 through December 5, 1971, inclusive.

(2) Weapons—Only nonmechanical bow as permitted by State regulations and flu-flu arrows may be used for hunting.

(3) Dogs—Not to exceed two dogs per hunter may be used in the hunting of pheasants, rabbits, skunk, badger, raccoon, coyote, bobcat, feral cat, magpie, and crow.

(4) Admittance—Entrance to the open area and parking of vehicles will be restricted to designated parking areas.

The provisions of this special regulation supplement the regulations which govern hunting on wildlife refuge areas generally which are set forth in Title 50, Code of Federal Regulations, Part 32, and are effective through December 6, 1971.

CHARLES R. BRYANT,
Refuge Manager, Monte Vista
National Wildlife Refuge,
Monte Vista, Colo.

AUGUST 9, 1971.

[FR Doc.71-17214 Filed 11-24-71;8:49 am]

PART 32—HUNTING

Monte Vista and Alamosa National Wildlife Refuges, Colo.

The following special regulation is issued and is effective on date of publication in the FEDERAL REGISTER (11-25-71).

§ 32.22 Special regulations: upland game; for individual wildlife refuge areas.

COLORADO

MONTE VISTA NATIONAL WILDLIFE REFUGE

The public hunting of pheasants on the Monte Vista National Wildlife Refuge, Colo., is permitted only on the area designated by signs as open to hunting. This open area, comprising 5,314 acres, is delineated on maps available at refuge headquarters, Monte Vista, Colo., and from the Regional Director, Bureau of Sport Fisheries and Wildlife, Post Office Box 1306, Albuquerque, NM 87103.

Hunting shall be in accordance with all applicable State regulations governing the hunting of pheasants subject to the following special conditions:

(1) The pheasant hunting season on the refuge extends from November 27 through December 5, 1971, inclusive.

(2) Dogs—Not to exceed two dogs per hunter may be used in the hunting of pheasants.

(3) Admittance—Entrance to the open area and parking of vehicles will be restricted to designated parking areas.

(4) Hunting with rifles and hand guns is prohibited.

The provisions of this special regulation supplement the regulations which govern hunting on wildlife refuge areas generally which are set forth in Title 50, Code of Federal Regulations, Part 32, and are effective through December 6, 1971.

ALAMOSA NATIONAL WILDLIFE REFUGE

The public hunting of pheasants on the Alamosa National Wildlife Refuge, Colo., is permitted only on the area designated by signs as open to hunting. This open area, comprising 3,267 acres, is delineated on maps available at refuge headquarters, Alamosa, Colo., and from the Regional Director, Bureau of Sport Fisheries and Wildlife, Post Office Box 1306, Albuquerque, NM 87103.

Hunting shall be in accordance with all applicable State regulations governing the hunting of pheasants subject to the following special conditions:

- (1) The pheasant hunting season on the refuge extends from November 27 through December 5, 1971, inclusive.
- (2) Dogs—Not to exceed two dogs per hunter may be used in the hunting of pheasants.
- (3) Admittance—Entrance to the open area and parking of vehicles will be restricted to designated parking areas.
- (4) Hunting with rifles and hand guns is prohibited.

The provisions of this special regulation supplement the regulations which govern hunting on wildlife refuge areas generally which are set forth in Title 50, Code of Federal Regulations, Part 32, and are effective through December 6, 1971.

CHARLES R. BRYANT,
Refuge Manager, Monte Vista
National Wildlife Refuge,
Monte Vista, Colo.

AUGUST 6, 1971.

[FR Doc.71-17215 Filed 11-24-71;8:49 am]

Title 6—ECONOMIC STABILIZATION

Chapter II—Pay Board

PART 201—STABILIZATION OF WAGES AND SALARIES

Interpretive, Definitional, and Procedural Decisions

The purpose of these amendments is to set forth for public information and guidance in the appendices to Part 201, interpretive, definitional, and procedural decisions adopted by the Pay Board. Appendix B—Interpretive Decisions Adopted by the Pay Board and Appendix C—Definitional Decisions Adopted by the Pay Board were published in the FEDERAL REGISTER on November 17, 1971 (36 F.R. 21952). A new appendix, Appendix D—Procedural Decisions Adopted by the Pay Board, is added to set forth daily procedural decisions of the Pay Board until such decisions can be incorporated into the regulations under this chapter. When a decision is incorporated into the regulations it will be deleted from its proper appendix.

Pursuant to the authority vested in the Pay Board by the Economic Stabilization Act of 1970, as amended (Public Law 91-379, 84 Stat. 799; Public Law 91-558, 84 Stat. 1468; Public Law 92-8, 85 Stat. 13; Public Law 92-15, 85 Stat. 38), Executive Order No. 11627 (36 F.R. 20139, Oct. 16, 1971), and Cost of Living Council Order No. 3 (36 F.R. 20202, Oct. 16, 1971), the Pay Board hereby adopts these following amendments to the appendices.

Because of the need for immediate guidance from the Pay Board with respect to the provisions contained in these amendments to the appendices, it is hereby found impracticable to issue such amendments with notice and public procedure thereon under 5 U.S.C., section 553(b), or subject to the effective date limitation of 5 U.S.C., section 553(d).

Effective date. These amendments and appendices shall be effective on and after November 14, 1971.

GEORGE H. BOLDT,
Chairman of the Pay Board.

PARAGRAPH 1. Appendix B, relating to Interpretive Decisions Adopted by the Pay Board, is amended by adding items (3), (4), (5), and (6) thereto, to read as follows:

APPENDIX

INTERPRETIVE DECISIONS ADOPTED BY THE PAY BOARD

(3) *Tandem relationships (Adopted November 19, 1971).* For purposes of permitting retroactivity under § 201.13 during the freeze period in certain recognized tandem relationships (as defined in item (3) of Appendix C—Definitional Decisions Adopted by the Pay Board), the following conditions must be met:

- (a) The basic agreement to which the tandem is claimed must have been completed before August 15, 1971;
- (b) The tandem relationship was clearly established as a past pay practice either for 5 years or in the last two bargaining agreements;
- (c) The tandem agreement for which retroactivity is sought expired no more than 30 days after the basic agreement; and
- (d) It can be shown that retroactivity was either an established practice or had been agreed to prior to the end of the freeze.

(4) *Low wage employees (Adopted November 19, 1971).* For purposes of permitting retroactivity in cases of severe inequities under § 201.13(c) during the freeze period, payments of retroactive increases may be made to employees who would have become eligible for a pay increase during the freeze and whose rate of pay prior to the freeze was \$2 per hour or less.

(5) *One-time benefits (Adopted November 19, 1971).* For purposes of permitting retroactivity in cases of severe inequities under § 201.13(c) during the freeze period, retroactive payments may be made in the case of employees who would have become eligible for a new or increased benefit during the freeze and who otherwise (because of death, retirement, etc.) cannot become eligible for the benefit after the freeze period.

(6) *Merit and salary administration plans (Adopted November 22, 1971).* Existing contract provisions providing for merit increases

within established rate ranges may be continued in new agreements which become effective after November 13, 1971. Any increases applied to a rate range shall be considered a raise in wages or salaries under the regulations adopted by the Pay Board. However, individual increases within the rate range under such plans shall not be considered a wage or salary increase under such regulations.

Where no labor agreement exists, aggregate individual pay increases under a merit plan and/or salary administration plan shall be considered pay increases subject to the general pay standard. However, individual increases may be made under an initial labor agreement or established pay practice which incorporates a well-defined plan: *Provided,* That the plan is administered in good faith and in accordance with previous policies and practices, and provided that such individual increases are made within minimum and maximum levels of rate ranges which are subject to the general wage and salary standard.

PAR. 2. Appendix C, relating to Definitional Decisions Adopted by the Pay Board, is amended by adding item (3) thereto to read as follows:

APPENDIX C

DEFINITIONAL DECISIONS ADOPTED BY THE PAY BOARD

(3) *Tandem relationships (Adopted November 19, 1971).* A "tandem relationship" means a well-established and consistently maintained practice whereby the precise timing, amount, and nature of general increases in wages, salaries, and other compensation of a given appropriate employee unit have so followed those of another such unit of employees of the same employer or of other employers within a commonly recognized industry (such as SIC two-digit category) that a general increase, in the normal operation of the practice, would have been put into effect and have been applicable to work performed on or before November 13, 1971, but for the operation of the freeze.

PAR. 3. Part 201 is amended by adding at the end thereof a new Appendix D—Procedural Decisions Adopted by the Pay Board. This new provision reads as follows:

APPENDIX D

PROCEDURAL DECISIONS ADOPTED BY THE PAY BOARD

(1) *Challenges (Adopted November 22, 1971).* Pursuant to paragraph (f) of Pay Board Order No. 1 (36 F.R. 21798), the Internal Revenue Service shall process challenges by parties at interest, make an investigation, and report the positions of all parties at interest, including the forwarding of supporting documents, to the Pay Board for determination.

(2) *Retroactivity under § 201.13; rulings (Adopted November 22, 1971).* Pursuant to paragraph (c) of Pay Board Order No. 1 (36 F.R. 21798), the Internal Revenue Service may rule on requests for retroactivity under paragraphs (a) and (b) of § 201.13, and on requests for retroactivity with respect to tandem relationships. (See item (3) of Appendix B—Interpretive Decisions Adopted by the Pay Board and item (3) of Appendix C—Definitional Decisions Adopted by the Pay Board). In the event of an adverse ruling by the Internal Revenue Service an appeal may be made to the Pay Board.

RULES AND REGULATIONS

(3) *Self-determinations; low-wage employees; one-time benefits* (Adopted November 22, 1971). Subject to spot-checks for compliance by the Internal Revenue Service, employers may determine for themselves

whether to make retroactive payments applicable to the freeze period in the case of items (4) and (5) of Appendix B—Interpretive Decisions Adopted by the Pay Board.

[FR Doc.71-17429 Filed 11-24-71;4:32 pm]

Proposed Rule Making

DEPARTMENT OF AGRICULTURE

Agricultural Stabilization and Conservation Service

[7 CFR Part 706]

NAVAL STORES CONSERVATION

Notice of 1972 Cost-Sharing Program

Notice is hereby given that pursuant to the authority in the Soil Conservation and Domestic Allotment Act, as amended, the Secretary of Agriculture proposed to issue the regulations set forth below to govern the 1972 Naval Stores Conservation Program.

The proposed regulations are identical to the 1971 regulations, including Amendment 1, the addition of Practice 11, Planting of superior trees. It is proposed that Practice 11 of the 1972 Naval Stores Conservation Program be started prior to January 1, 1972 (in the same manner as for the Rural Environmental Assistance Program) to make fullest use of funds during the tree planting season which begins about the middle of November.

The purpose of the Naval Stores Conservation Program is to provide for Federal cost-sharing in carrying out approved conservation practices related to the extraction of gum from living slash and longleaf pines. Cost-shares are predicated upon the economic use and conservation of soil and timber resources on turpentine farms.

All persons who wish to submit written data, views, or objections pertaining to the proposed regulations may do so by submitting them in duplicate to the Department of Agriculture, Forest Service, Division of Cooperative Forestry, South Agriculture Building, Room 3242, Washington, D.C. 20250, within 30 days of the date of this notice in the FEDERAL REGISTER.

All written submissions made pursuant to this notice will be available for public inspection in the Division of Cooperative Forestry during regular business hours. (7 CFR 1.27(b))

J. PHIL CAMPBELL,
Acting Secretary of Agriculture.

NOVEMBER 22, 1971.

PART 706—NAVAL STORES CONSERVATION

Subpart G—1972

GENERAL PROVISIONS

Sec.	
706.1	Purposes and general requirements.
706.2	Required performance.
706.3	Double-headed nails requirement.
706.4	Fire protection.
706.5	Bark-bar requirement.
706.6	Inspection assistance.

CONSERVATION PRACTICES AND RATES OF FEDERAL COST-SHARES

Sec.	
706.7	Practice 1: Working only 9 inch d.b.h. or larger trees.
706.8	Practice 2: Working only 10 inch d.b.h. or larger trees.
706.9	Practice 3: Working only 11 inch d.b.h. or larger trees.
706.10	Practice 4: Working only 12 inch d.b.h. or larger trees.
706.11	Practice 5: Restricting turpentine to previously worked trees.
706.12	Practice 6: Working only selectively marked trees.
706.13	Practice 7: Initial use of spiral gutters or Varn aprons and double-headed nails.
706.14	Practice 8: Use of disposable bags.
706.15	Practice 9: Removal of cups and tins from faces on small trees.
706.16	Practice 10: Pilot plant tests of new methods and equipment.
706.17	Practice 11: Planting of superior trees.

GENERAL PROVISIONS RELATING TO FEDERAL COST-SHARING

706.18	Increase in small Federal cost-shares.
706.19	Maintenance of practices.
706.20	Practices defeating purposes of programs.
706.21	Federal cost-shares not subject to claims.
706.22	Assignments.
706.23	Death, incompetency, or disappearance of producer.
706.24	Maximum Federal cost-share limitation.
706.25	Evasion.

APPLICATION FOR PAYMENT OF FEDERAL COST-SHARES

706.26	Persons eligible to file application for payment of Federal cost-shares.
706.27	Time and manner of filing applications and required information.

APPEALS

706.28	Appeals.
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DEFINITIONS

706.29	Definitions.
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AUTHORITY, AVAILABILITY OF FUNDS, APPLICABILITY, AND ADMINISTRATION

706.30	Authority.
706.31	Availability of funds.
706.32	Applicability.
706.33	Administration.

AUTHORITY: The provisions of this Subpart G issued under section 4, 49 Stat. 164, secs. 7-15, 16(a), and 17, 49 Stat. 1148, as amended; 16 U.S.C. 590d, 590g to 590o, 590p(a), and 590q.

GENERAL PROVISIONS

§ 706.1 Purposes and general requirements.

(a) *Purposes.* The purpose of the 1972 Naval Stores Conservation Program (referred to in this subpart as "this program") is to restrict turpentine to the most productive timber, to conserve the worked trees, to protect and permit un-

disturbed growth of the uncupped trees and to conserve the soil, water, and timber resources. Under this program the Federal Government will effectuate such purposes by sharing with turpentine farmers the cost of carrying out approved conservation practices in accordance with the provisions of the regulations in this subpart and such modifications thereof as may hereafter be made. Cost-shares are predicated upon the economic use and conservation of soil and timber resources on turpentine farms, and computed on the faces in the tract or drift where an approved conservation practice is carried out. This program provides cost-sharing for conservation practices only on turpentine farms having tracts or drifts of faces which were installed during, or after, the 1968 season.

(b) *General requirements.* No tract or drift can qualify for cost-sharing under more than one conservation practice other than as provided for under practices specified in §§ 706.13, 706.14, and 706.15. In each of the practices except § 706.17, the faces are to be worked sufficiently to obtain at least one dipping of gum from the current year's working.

§ 706.2 Required performance.

(a) *Approved conservation practices.* Each participating producer shall carry out at least one of the approved conservation practices in every tract or drift of faces operated by him during the 1972 turpentine season. This requirement will not apply if the U.S. Forest Service or State Forest Agency determines that the condition of a particular tract or drift does not warrant carrying out approved conservation practices as a practical or economic matter, in which case the U.S. Forest Service or State Forest Agency may approve face installations made without carrying out a conservation practice. In cases where such approval is given for specific tracts or drifts of the turpentine farm, no cost will be shared for any faces in such tracts or drifts.

(b) *Practice components.* Cost-sharing may be approved under the 1972 program for only the component parts of the practices which are completed during the program year. The producer must complete all the remaining components of the practice in accordance with good forestry practices and all applicable requirements of this program to be eligible for cost-sharing under a subsequent program. Separate rates of cost-sharing have been established for each component part of each practice.

(c) *First year working.* The cost-share for this component is applicable to tracts or drifts having only eligible virgin

working faces, i.e., faces installed for the first working during the 1972 season. If faces have been installed contrary to the requirements for eligible faces, the cups and tins for such faces shall be removed within 60 days after the producer is notified by the U.S. Forest Service or State Forest Agency, or the tract or drift will be considered only for qualification for cost-shares under the practice with the next lower rate of payment.

(d) *Second, third, fourth, or fifth year working.* The cost-shares for working of faces for second, third, fourth, or fifth years are applicable under the 1972 program to faces which were installed and met the eligible face requirements during the 1968, 1969, 1970, or 1971 season. Such cost-shares may also be allowed to new participating producers working tracts or drifts which had some under-sized trees from which cups have been removed by the time of first elevation. New faces installed in 1972 and those installed in 1972 or prior years contrary to the requirements for eligible faces will disqualify the tracts or drifts for cost-sharing, unless the cups and tins on such faces shall be removed within 60 days after the producer is notified by the U.S. Forest Service or State Forest Agency. If such faces are not removed within the 60-day period, there may be withheld or required to be refunded the entire cost-shares for the tract or drift previously paid to the producer who installed the improper faces.

(e) *Practices under § 706.7, 706.8, 706.9, 706.10, 706.11, 706.12, 706.13, or 706.16 which require more than 1 year for completion.* Cost-shares may be approved under this program for the completion of a component of a practice only on the condition that the producer agrees in writing to complete the remaining components of the practice according to program provisions and within the time prescribed by the U.S. Forest Service, unless prevented from doing so by reasons beyond his control, or to refund the cost-shares paid to him. The extension of the period for completion of the components shall not constitute a commitment to approve cost-shares therefor under a subsequent program. Approval of cost-sharing for other practices under a subsequent program may also be denied until the remaining components are completed.

§ 706.3 Double-headed nails requirement.

Use of double-headed nails is required in the elevation of all cups and tins.

§ 706.4 Fire protection.

Each producer shall during the 1972 turpentine season cooperate with any existing cooperative fire control system serving the general area where his turpentine farm is located, unless he is otherwise following approved forest fire protection on his turpentine farm.

§ 706.5 Bark-bar requirement.

No back face shall be worked on any tree unless a live bark-bar on each side

of the back face is provided and maintained throughout the 1972 turpentine season, the total of the two bark-bars being not less than 7 inches in width, measured horizontally along the bark surface at the narrowest point: *Provided, however,* That the restriction with respect to the width of the bark-bar shall not apply to any tree which has on it two or more old faces, including any back face installed prior to 1972. Faces having bark-bars totaling less than 7 inches shall not be worked in a manner that will result in leaving bark-bars less than those of former workings measured at the narrowest point.

§ 706.6 Inspection assistance.

Each producer shall assist representatives of the U.S. Forest Service or State Forest Agency in the administration of this program by:

(a) Giving them free access to his turpentine farm or farms;

(b) Counting all faces and reporting separately thereon by tracts and drifts to the local inspector;

(c) Furnishing information on burned areas, cutting operations, and interests in other turpentine farms as requested;

(d) Furnishing competent labor to assist the local inspector in counting faces;

(e) Submitting an application for payment of Federal cost-shares (Form 3200-3) and other prescribed forms;

(f) Notifying the U.S. Forest Service or State Forest Agency promptly of any change in ownership, control, or number of faces worked; and

(g) Otherwise facilitating the work of the local inspector in checking compliance with the terms and conditions of this program.

CONSERVATION PRACTICES AND RATES OF FEDERAL COST-SHARES

§ 706.7 Practice 1: Working only 9-inch d.b.h. or larger trees.

(a) *Description of practice.* This practice consists of installing and working faces and raising the cups and tins on 9-inch d.b.h. or larger trees over a period of 2 to 5 years.

(b) *Eligible faces.* Trees on which faces are installed shall be selected in a manner that will result in having no faces (except back faces on trees having a worked-out face) on trees which are less than 9 inches d.b.h. and only one face on trees less than 14 inches d.b.h.

(c) *Components of practice and rates of cost-sharing.* Components of the practice and rates of cost-sharing thereof shall be as follows:

(1) Initial installation and first-year working of 9-inch d.b.h. or larger trees; 4 cents per face.

(2) Working of faces for second, third, fourth, or fifth year; 1 cent per face.

(3) Initial use of double-headed nails in the initial installation or in the raising of cups and tins to conserve the worked portion of the trees; 1 cent per face. This component is not applicable where § 706.13 is used.

§ 706.8 Practice 2: Working only 10-inch d.b.h. or larger trees.

(a) *Description of practice.* This practice consists of installing and working faces and raising the cups and tins on 10-inch d.b.h. or larger trees over a period of 2 to 5 years.

(b) *Eligible faces.* Trees on which faces are installed shall be selected in a manner that will result in having no faces (except back faces on trees having a worked-out face) on trees which are less than 10 inches d.b.h. and only one face on trees less than 14 inches d.b.h.

(c) *Components of practice and rates of cost-sharing.* Components of the practice and the rates of cost-sharing thereof shall be as follows:

(1) Initial installation and first year working of 10-inch d.b.h. or larger trees; 9 cents per face.

(2) Working of faces for second, third, fourth, or fifth year; 6 cents per face.

(3) Initial use of double-headed nails in the initial installation or in the raising of cups and tins to conserve the worked portion of the trees; 1 cent per face. This component is not applicable where § 706.13 is used.

§ 706.9 Practice 3: Working only 11-inch d.b.h. or larger trees.

(a) *Description of practice.* This practice consists of installing and working faces and raising the cups and tins on 11-inch d.b.h. or larger trees over a period of 2 to 5 years.

(b) *Eligible faces.* Trees on which faces are installed shall be selected in a manner that will result in having no faces (except back faces on trees having a worked-out face) on trees which are less than 11 inches d.b.h. and only one face on trees less than 14 inches d.b.h.

(c) *Components of practice and rates of cost-sharing.* Components of the practice and rates of cost-sharing thereof shall be as follows:

(1) Initial installation and first year working of 11-inch d.b.h. or larger trees; 10 cents per face.

(2) Working of faces for second, third, fourth, or fifth year; 6 cents per face.

(3) Initial use of double-headed nails in the initial installation or in the raising of cups and tins to conserve the worked portion of the tree; 1 cent per face. This component is not applicable where § 706.13 is used.

§ 706.10 Practice 4: Working only 12-inch d.b.h. or larger trees.

(a) *Description of practice.* This practice consists of installing and working faces and raising the cups and tins on 12-inch d.b.h. or larger trees over a period of 2 to 5 years.

(b) *Eligible faces.* Trees on which faces are installed shall be selected in a manner that will result in having no faces (except back faces on trees having a worked-out face) on trees which are less than 12 inches d.b.h. and only one face on trees less than 14 inches d.b.h.

(c) *Components of practice and rates of cost-sharing.* Components of the

practice and rates of cost-sharing thereof shall be as follows:

(1) Initial installation and first year working of 12-inch d.b.h. or larger trees; 11 cents per face.

(2) Working of faces for second, third, fourth, or fifth year; 6 cents per face.

(3) Initial use of double-headed nails in the initial installation or in the raising of cups and tins to conserve the worked portion of the trees; 1 cent per face. This component is not applicable where § 706.13 is used.

§ 706.11 Practice 5: Restricting turpentine to previously worked trees.

(a) *Description of practice.* This practice consists of installing and working faces and raising the cups and tins over a period of 2 to 5 years only on trees having a previously worked face.

(b) *Eligible faces.* Trees on which faces are installed shall be selected in a manner that will result in having no faces on round trees.

(c) *Components of practice and rates of cost-sharing.* Components of the practice and rates of cost-sharing thereof shall be as follows:

(1) Initial installation and first year working of faces on previously worked trees; 12 cents per face.

(2) Working of faces for second, third, fourth, or fifth year; 6 cents per face.

(3) Initial use of double-headed nails in the initial installation or in the raising of cups and tins to conserve the worked portion of the tree; 1 cent per face. This component is not applicable where § 706.13 is used.

§ 706.12 Practice 6: Working only selectively marked trees.

(a) *Description of practice.* This practice consists of installing and working faces and raising the cups and tins on selectively marked trees over a period of 2 to 5 years.

(b) *Eligible faces.* Only trees 9 inches or more d.b.h. which should be removed to improve the timber stand may be cupped and there shall be only one face on trees less than 14 inches d.b.h. Cupping shall be limited to trees selectively marked in advance in accordance with good, approved timber management practices to insure production of larger diameter class timber or to provide other stand improvement measures as approved by the U.S. Forest Service: *Provided*, That the number of remaining uncupped trees per acre shall average at least the minimum number per acre specified by the U.S. Forest Service in its Minimum Stocking Guide issued June 4, 1956, as amended, and be well distributed over the area.

(c) *Components of practice and rates of cost-sharing.* Components of the practice and rates of cost-sharing thereof shall be as follows:

(1) Initial installation and first year working of selectively marked trees; 12 cents per face. If faces have been installed contrary to the requirements for eligible faces, the area will be considered only for qualification for cost-shares un-

der one of the diameter cupping practices, specified in §§ 706.7, 706.8, 706.9, or 706.10.

(2) Working of faces for second, third, fourth, or fifth year; 6 cents per face.

(3) Initial use of double-headed nails in the initial installation or in the raising of cups and tins to conserve the worked portion of the tree; 1 cent per face. This component is not applicable where § 706.13 is used.

§ 706.13 Practice 7: Initial use of spiral gutters or Varn aprons and double-headed nails.

(a) *Purpose.* The purpose of this practice is to minimize damage to the tree in installing faces for the virgin year or in the first elevation and to conserve the worked portion of the tree.

(b) *Description of practice.* This practice consists of using spiral gutter or Varn aprons attached with double-headed nails when cups and tins are initially installed on the face or when cups and tins are elevated for the first time.

(c) *Eligible faces.* Faces on trees installed to meet the requirements of §§ 706.7, 706.8, 706.9, 706.10, 706.11, 706.12, and 706.16 may qualify for this practice, the cost-share for which is in addition to the aforesaid sections.

(d) *Rate of cost-sharing.* The rate of cost-sharing for this practice is 4 cents per face.

(e) *Cost-sharing limited to virgin working faces.* This practice is limited to tracts or drifts having only virgin working faces, i.e., faces installed for the first working during the 1972 season or faces upon which the cups and tins are elevated for the first time during the 1972 season. On accepting cost-sharing for this practice the producer agrees to use the spiral gutter or Varn apron and double-headed nails to attach the tins in all subsequent raisings and attachment of tins to the face.

(f) *Installation of cups and tins.* Cups and tins shall be installed in a manner that will minimize the loss of gum and restrict amount of damage to the tree. Spiral gutters or Varn aprons shall be used and the tins shall be attached to the tree with double-headed nails. In smoothing the tree and seating the cup for virgin installation, exposure of wood shall be limited to areas on the tree having burls, ridges, or other deformities.

§ 706.14 Practice 8: Use of disposable paper bags.

(a) *Purpose.* The purpose of this practice is to encourage producers to use paper bags to improve the quality of gum, keep the butt section of the tree available for other uses and to promote greater productivity from the woods laborers.

(b) *Description of practice.* This practice consists of using disposable paper bags instead of spiral gutters or Varn aprons and metal or clay cups.

(c) *Eligible faces.* Faces on trees installed to meet the requirements of §§ 706.7, 706.8, 706.9, 706.10, 706.11, 706.12, and 706.16 may qualify for this practice, the cost-share for which is in addition to the aforesaid sections.

(d) *Rate of cost-sharing.* The rate of cost-sharing for this practice is 9 cents per face.

(e) *Use of paper bags.* On accepting cost-sharing for this practice the producer agrees to use paper bags attached with wire staples in combination with a bark jump streak in lieu of metal gutters or tins. Once installed, the producer agrees to continue the use of paper bags throughout the 1972 season. Paper bags will be installed in a manner that will minimize the loss of gum and restrict the amount of damage to the tree. In smoothing the tree and seating the bag for virgin installation, exposure of wood shall be limited to areas on the tree having burls, ridges, or other deformities.

§ 706.15 Practice 9: Removal of cups and tins from faces on small trees.

(a) *Purpose.* The purpose of this practice is to encourage producers who have not participated in the 1970 or 1971 programs to discontinue working small unproductive trees, to promote improved naval stores and forestry practices, and to improve productivity of the woodland.

(b) *Description of practice.* This practice consists of removing the cups and tins and discontinuing the working of small unproductive timber and meeting all other requirements for participation in this program.

(c) *Eligible faces.* All faces installed for the first working in 1972 on trees under 9 inches d.b.h. and all but one face on trees between 9 and 14 inches d.b.h. having two or more faces shall be eligible. Working of faces shall be discontinued and cups and tins removed by tracts or drifts within 60 days after the producer is notified by the U.S. Forest Service or State Forest Agency to meet the eligible face requirements of § 706.7. Only producers who did not participate in the 1970 or 1971 programs are eligible for cost-sharing under this practice.

(d) *Rate of cost-sharing.* The rate of cost-sharing for this practice is 10 cents per face. (The cost-share is applicable to faces discontinued by removal of cups and tins to permit the tract or drift to meet the eligible face requirements of § 706.7.)

§ 706.16 Practice 10: Pilot plant tests of new methods and equipment.

(a) *Purpose.* The purpose of this practice is to conduct controlled demonstrations or experiments to test values of management practices, new methods and equipment for gum production.

(b) *Description of practice.* This practice consists of carrying out practical demonstrations or tests of management practices, new methods or equipment according to requirements of the U.S. Forest Service.

(c) *Eligible faces.* Only faces or check trees in selected tracts used in controlled demonstrations or tests carried out in accordance with provisions prescribed by the U.S. Forest Service are eligible for cost-sharing.

(d) *Components of practice and rates of cost-sharing.* Components of the practice and rates of cost-sharing thereof are 15 cents per face for faces meeting

the requirements of §§ 706.7, 706.8, 706.9, 706.10, 706.11, and 706.12.

§ 706.17 Practice 11: Planting of superior trees.

(a) *Purpose.* The purpose of this practice is to improve the stocking of depleted forest land with trees of proven increased oleoresin yield and faster wood growth. Such trees will produce more crude gum, pulpwood, sawtimber, plywood, poles, and other forest products.

(b) *Description of practice.* This practice consists of planting certified genetically superior high gum yielding slash pine seedlings, developed from the Olustee strain, on properly prepared sites and at spacings specified by the U.S. Forest Service.

(c) *Eligible acres.* Only land owned by a participant which is selected and planted in accordance with provisions prescribed by the U.S. Forest Service are eligible for cost-sharing.

(d) *Rate of cost-sharing.* The rate of cost-sharing for this practice is 80 percent of the actual cost not to exceed \$20 per acre.

GENERAL PROVISIONS RELATING TO FEDERAL COST-SHARING

§ 706.18 Increase in small Federal cost-shares.

The total of the payment computed for any producer with respect to his turpentine farm under the Naval Stores Conservation Program and the cost-share computed for him on the same farm under the Rural Environmental Assistance Program for practices other than practice F-4 (§ 701.75(d) of this chapter) shall be increased as follows: (a) Any Federal cost-sharing amounting to 71 cents or less shall be increased to \$1; (b) any Federal cost-sharing amounting to more than 71 cents but less than \$1 shall be increased by 40 percent; (c) any Federal cost-sharing amounting to \$1 or more shall be increased in accordance with the following schedule:

Amount of cost-shares computed:	Increase in cost-shares
\$1.00 to \$1.99	\$0.40
\$2.00 to \$2.99	.80
\$3.00 to \$3.99	1.20
\$4.00 to \$4.99	1.60
\$5.00 to \$5.99	2.00
\$6.00 to \$6.99	2.40
\$7.00 to \$7.99	2.80
\$8.00 to \$8.99	3.20
\$9.00 to \$9.99	3.60
\$10.00 to \$10.99	4.00
\$11.00 to \$11.99	4.40
\$12.00 to \$12.99	4.80
\$13.00 to \$13.99	5.20
\$14.00 to \$14.99	5.60
\$15.00 to \$15.99	6.00
\$16.00 to \$16.99	6.40
\$17.00 to \$17.99	6.80
\$18.00 to \$18.99	7.20
\$19.00 to \$19.99	7.60
\$20.00 to \$20.99	8.00
\$21.00 to \$21.99	8.20
\$22.00 to \$22.99	8.40
\$23.00 to \$23.99	8.60
\$24.00 to \$24.99	8.80
\$25.00 to \$25.99	9.00
\$26.00 to \$26.99	9.20
\$27.00 to \$27.99	9.40
\$28.00 to \$28.99	9.60
\$29.00 to \$29.99	9.80

Amount of cost-shares computed:	Increase in cost-shares
\$30.00 to \$30.99	10.00
\$31.00 to \$31.99	10.20
\$32.00 to \$32.99	10.40
\$33.00 to \$33.99	10.60
\$34.00 to \$34.99	10.80
\$35.00 to \$35.99	11.00
\$36.00 to \$36.99	11.20
\$37.00 to \$37.99	11.40
\$38.00 to \$38.99	11.60
\$39.00 to \$39.99	11.80
\$40.00 to \$40.99	12.00
\$41.00 to \$41.99	12.10
\$42.00 to \$42.99	12.20
\$43.00 to \$43.99	12.30
\$44.00 to \$44.99	12.40
\$45.00 to \$45.99	12.50
\$46.00 to \$46.99	12.60
\$47.00 to \$47.99	12.70
\$48.00 to \$48.99	12.80
\$49.00 to \$49.99	12.90
\$50.00 to \$50.99	13.00
\$51.00 to \$51.99	13.10
\$52.00 to \$52.99	13.20
\$53.00 to \$53.99	13.30
\$54.00 to \$54.99	13.40
\$55.00 to \$55.99	13.50
\$56.00 to \$56.99	13.60
\$57.00 to \$57.99	13.70
\$58.00 to \$58.99	13.80
\$59.00 to \$59.99	13.90
\$60.00 to \$185.99	14.00
\$186.00 to \$199.99	(¹)
\$200.00 and over	(²)

¹ Increase to \$200.

² No increase.

§ 706.19 Maintenance of practices.

The sharing of costs by the Federal Government for performance of approved practices included in this program will be subject to the condition that the producer with whom the costs are shared will maintain such practices in accordance with good forestry practices as long as the timber remains under his control. There may be withheld or required to be refunded all cost-shares under this program or previous programs on tracts or drifts in which failure to maintain any or all practices occurs, except as modified by this section or § 706.2(d). The producer shall not be expected to maintain and complete the practice when prevented by destruction of the timber by fire, weather, insects, diseases, or other conditions beyond his control. Measures which will be considered as failure to maintain practices in accordance with good forestry practices shall include, but are not restricted to the following:

(a) *The cutting contrary to good forestry practices of turpentine trees in tracts or drifts (including current non-working areas) on which costs have been or would be shared under this program or the 1968, 1969, 1970, or 1971 program.* There may be withheld or required to be refunded the amount previously paid for each face for which costs were shared in 1968, 1969, 1970, 1971, or 1972 in the tracts or drifts in which such cutting occurs. Conformity to the following rules shall be considered good cutting practices:

(1) When turpentine trees are cut for thinnings at least the minimum number of trees per acre specified in the Minimum Stocking Guide issued by the U.S. Forest Service June 4, 1956, as amended,

shall be left uncut and undamaged and well distributed over the cutting area.

(2) When turpentine trees are cut in a harvest cutting, at least 400 turpentine trees per acre shall be left uncut and undamaged and well distributed over the cutting area, or a minimum of the following number or combination of numbers of thrifty turpentine seed trees per acre: 9 inches or over d.b.h.—six trees, 8 inches d.b.h.—nine trees, or 7 inches d.b.h.—12 trees, shall be left uncut and undamaged, or if clearcut, artificial planting of at least 500 trees per acre will be accomplished prior to April 1, 1975.

(b) *Raising cups and tins without double-headed nails.* There may be withheld or required to be refunded all of the cost-shares earned under this or previous programs on the tracts or drifts in which such improper raising occurs.

(c) *Picking up additional faces after the first year's working will disqualify the tract or drift for any further cost-sharing, unless the hardware is removed to limit the working to one age class of faces.* Such removal must be accomplished within 60 days of notification by the U.S. Forest Service or State Forest Agency.

(d) *Failure to meet bark-bar requirement.* There may be withheld or required to be refunded all or any part of cost-shares earned under this program on the tracts or drifts in which such improper chipping occurs.

(e) *The burning by the producer on any tract or drift of his turpentine farm which will destroy natural reforestation on land which is not fully stocked with turpentine trees or which will result in damage to established turpentine tree reproduction.* There may be withheld or required to be refunded all or any part of cost-shares earned under this program on the tracts or drifts in which such improper burning occurs.

(f) *The installation of new faces on round trees less than 9 inches d.b.h. or more than one face on round trees between 9 and 14 inches d.b.h. in tracts or drifts having working faces installed during or prior to the 1967 turpentine season.* There may be withheld or required to be refunded 2 cents per face for each working face installed during or prior to 1967 in the tracts or drifts in which such installation occurs.

§ 706.20 Practices defeating purposes of programs.

If the U.S. Forest Service or State Forest Agency finds that any producer has adopted or participated in any practice which tends to defeat the purposes of this program or previous programs, it may withhold or require to be refunded all or any part of any cost-share which has been or otherwise would be made to such producer under this program, except as modified by § 706.2(d) or § 706.19.

§ 706.21 Federal cost-shares not subject to claims.

Any Federal cost-share, or portion thereof, due any person shall be determined and allowed without regard to

questions of title under State law; without deduction of claims for advances except as provided in § 706.22; and without regard to any claim or lien against any crop, or proceeds thereof, in favor of the owner or any other creditor. The regulations issued by the Secretary governing setoffs and withholdings, part 13 of this title, as amended, shall be applicable to the program.

§ 706.22 Assignments.

Any producer who may be entitled to any Federal cost-share under the 1972 program may assign his right thereto, in whole or in part, in accordance with the regulations governing the assignment of payments, Part 709 of this chapter, as amended.

§ 706.23 Death, incompetency, or disappearance of producer.

In case of the death, incompetency, or disappearance of any producer, the cost-share due him shall be paid to his successor, as determined in accordance with the regulations in Part 707 of this chapter, as amended.

§ 706.24 Maximum Federal cost-share limitation.

For practices other than practice F-4 (§ 701.75(d)) of this chapter, the total of all Federal cost-shares under this program and the 1972 Rural Environmental Assistance Program to any person with respect to farms, ranching units, and turpentine places in the United States, Puerto Rico, and the Virgin Islands for approved practices which are not carried out under pooling agreements shall not exceed the sum of \$2,500, and for all approved practices, including those carried out under pooling agreements, shall not exceed the sum of \$10,000. The rules for applying the maximum Federal cost-share limitation contained in the regulations governing the Rural Environmental Assistance Program, Part 701 of this chapter, as amended, shall be applicable to this program.

§ 706.25 Evasion.

All or any part of any Federal cost-share which has been or otherwise would be made to any producer participating in this program may be withheld or required to be refunded if he has adopted or participated in adopting any scheme or device, including the dissolution, reorganization, revival, formation, or use of any corporation, partnership, estate, trust, or any other means which was designed to evade the provisions of § 706.24.

APPLICATION FOR PAYMENT OF FEDERAL COST-SHARES

§ 706.26 Persons eligible to file application for payment of Federal cost-shares.

An application for payment of Federal cost-shares may be filed by any producer who contributed to the performance of any approved Naval Stores Conservation practice and is working faces for the production of gum naval stores, during the 1972 turpentine season, which were installed during or after the 1968 season.

If it is determined that two or more producers contributed to carrying out the practice, the Federal cost-shares shall be divided among such producers in the proportion which the Program Supervisor determines they contributed to carrying out the practice. In making this determination, the Program Supervisor shall take into consideration the value of the labor, equipment, or material contributed by each person toward the carrying out of each practice on a particular acreage, and shall assume that each contributed equally unless it is established to the satisfaction of the Program Supervisor that their respective contributions thereto were not in equal proportion. The furnishing of land, trees, or the right to use water will not be considered as a contribution to the carrying out of any practice.

§ 706.27 Time and manner of filing applications and required information.

Payment of Federal cost-shares will be made only when a report of performance is submitted to the U.S. Forest Service or State Forest Agency on or before December 31, 1972, on the prescribed Form (3200-3) Application for Payment. Payment of Federal cost-shares may be withheld from any producer who fails to file any form or furnish any information required with respect to any turpentine farm which is being operated by him.

§ 706.28 Appeals.

Any producer may, within 15 days after notice thereof is forwarded to or made available to him, request the Southeastern Area Director in writing to review the recommendation or determination of the Program Supervisor in any matter affecting the right to or the amount of his Federal cost-shares with respect to the producer's turpentine farm. The Southeastern Area Director shall notify the producer of his decision in writing within 60 days after the submission of the appeal. If the producer is dissatisfied with the decision of the Southeastern Area Director he may, within 15 days after the decision is forwarded to or made available to him, request the Chief of the U.S. Forest Service to review the case and render his decision, which shall be final.

DEFINITIONS

§ 706.29 Definitions.

(a) *Gum naval stores.* Crude gum (oleoresin), gum turpentine, and gum rosin produced from living trees.

(b) *Producer or turpentine farmer.* Any person, firm, partnership, corporation, or other business enterprise doing business as a single legal entity, producing gum naval stores from turpentine trees controlled through fee ownership, cash lease, percentage lease, share lease, or other form of control.

(c) *Turpentine tree.* Any tree of either of the two species, longleaf pine (*Pinus palustris*) or slash pine (*Pinus elliottii* engelm.).

(d) *Turpentine farm.* This includes (1) land growing turpentine trees, owned or leased by a producer in one general lo-

cality, which are currently being worked for gum naval stores, herein referred to as a working area; and (2) all commercially valuable or potentially valuable forest land, owned by a producer on which turpentine trees are growing and which are not being currently worked for gum naval stores, herein referred to as a non-working area.

(e) *Tract.* A portion of a working area having a continuous stand of trees supporting faces of one age class or intermingled age classes.

(f) *Drift.* A portion or subdivision of a tract set apart for convenience of operation or administration.

(g) *Turpentine season.* The entire calendar year, or, if a farm is operated less than the full calendar year, that period within the calendar year during which a producer is operating his turpentine farm for the production of gum naval stores.

(h) *Face.* The whole wound or aggregate of streaks made by chipping, streaking, or pulling the live tree to stimulate the flow of crude gum (oleoresin) herein referred to as gum.

(i) *Cup.* A container made of metal, clay, or other material hung on or below the face to accumulate the flow of gum.

(j) *Tins.* The gutters or aprons, made of sheet metal or other material, used to conduct the gum from a face into a cup.

(k) *D.b.h.* Diameter breast height, i.e., diameter of tree measured 4½ feet from the ground.

(l) *Round tree.* Any tree which has not been faced or scarred.

(m) *Scarred tree.* A tree having an idle face not over 36 inches in vertical measurement from the shoulder of the first streak to the shoulder of the last streak.

(n) *Worked-out face.* Any idle face which is 60 inches or more in vertical measurement between the shoulder of the first streak and the shoulder of the last streak, or dry face.

(o) *Back face.* A face placed on a tree having a previously worked face.

(p) *Spiral gutter.* A curved gutter that follows a spiral path around the tree.

(q) *Varn apron.* A curved two-piece adjustable apron with tacking flange.

(r) *Double-headed nail.* A nail with two heads meeting minimum specifications as follows: The overall length shall be 1½ inches; distance between heads a minimum of one-fourth inch; its wire gauge no smaller than 13; the driving head shall be of flat "Common Nail" type with diameter between five-thirtyseconds and one-fourth inch and diameter of clinching head one-fourth inch. (Double-headed nails specially designed for naval stores use are produced commercially by several manufacturers. Experience has shown that the use of double-headed nails meeting these specifications is satisfactory and meets the requirements for any type of installation and easy removal from the trees.)

(s) *Disposable paper bag.* A paper bag meeting the following minimum specifications: The bag shall be fabricated from 50-pound, wet-strength, Kraft paper laminated to a plastic film. Dimensions of the bag shall be approximately

16 inches wide laterally, 9½ inches high overall, with 3½ inch gussets, and an outside from 8½ inches high.

(t) *Staples for attaching paper bags.* Staples manufactured of soft iron, one-half to nine-sixteenths inch in length, averaging 16 to 21 staples per inch of clip, are satisfactory.

(u) *Virgin streak.* The first chipping of the tree following initial installation of the face.

(v) *Hardware.* All gutters, aprons, or metal strips of any kind whatsoever together with nails used to support same and nails used to support cups for the collection of raw gum resin.

(w) *State Forest Agency.* State Forester or comparable State official who has entered into a cooperative agreement with the U.S. Forest Service to provide technical assistance in carrying out this program.

AUTHORITY, AVAILABILITY OF FUNDS, APPLICABILITY, AND ADMINISTRATION

§ 706.30 Authority.

This program is approved pursuant to the authority vested in the Secretary of Agriculture under sections 7 to 15, 16(a), and 17 of the Soil Conservation and Domestic Allotment Act, as amended.

§ 706.31 Availability of funds.

(a) The provisions of this program are necessarily subject to such legislation affecting said program as the Congress of the United States may hereafter enact; the paying of the Federal cost-shares herein provided for is contingent upon such appropriation as the Congress may hereafter provide for such purpose; and the amounts of such Federal cost-shares will necessarily be within the limits finally determined by such appropriation and by the extent of participation in this program.

(b) The funds provided for this program will not be available for the payment of applications filed after December 31, 1973.

(c) If the total estimated cost-shares under the Naval Stores Conservation Program exceed the total funds available for cost-sharing, such cost-shares will be reduced equitably.

(d) The regulations in Part 796 of this chapter prohibiting the making of payments to program participants who, after August 10, 1971, harvest or knowingly permit to be harvested for illegal use marijuana or other such prohibited drug-producing plants on any part of the lands owned or controlled by them are applicable to this program.

§ 706.32 Applicability.

(a) The provisions of this program are not applicable to any turpentine operations within the public domain of the United States, including the lands and timber owned by the United States which were acquired or reserved for conservation purposes, or which are to be retained permanently under Government ownership (such lands include, but are not limited to lands owned by the United States which are administered by the U.S. Forest Service of the Department of

Agriculture or by the U.S. Fish and Wildlife Service of the Department of the Interior).

(b) This program is applicable to:

(1) Turpentine farms on privately owned lands;

(2) Lands owned by a State or political subdivision or agency thereof; or

(3) Lands owned by corporations which are either partly or wholly owned by the United States provided such lands are temporarily under such Government or corporation ownership and are not acquired or reserved for conservation purposes. (These include lands administered by the Farmers Home Administration, the Federal Farm Mortgage Corporation, a Production Credit Association, or the U.S. Department of Defense, and lands administered by any other agency complying with all of the foregoing provisions for eligibility.)

§ 706.33 Administration.

The U.S. Forest Service shall have charge of the administration of this program and is hereby authorized to prepare and to issue such bulletins, instructions and forms, and to make such determinations, as may be required to administer this program pursuant to the provisions of the regulations in this subpart. The field work shall be administered by the U.S. Forest Service through the office of the Southeastern Area Director, U.S. Forest Service, 1720 Peachtree Road NW., Atlanta, GA 30309. Information concerning this program may be secured from the U.S. Forest Service, Post Office Box 1625, Valdosta, GA 31601, its representatives, or from State Forest Agency offices in Alabama, Florida, Georgia, and Mississippi.

[FR Doc. 71-17291 Filed 11-24-71; 8:56 am]

Consumer and Marketing Service

[7 CFR Part 910]

LEMONS GROWN IN ARIZONA AND DESIGNATED PART OF CALIFORNIA

Proposed Change in Grower Representation

Notice is hereby given that the Department is considering a proposed amendment, as hereinafter set forth, to the rules and regulations (Subpart—Rules and Regulations; 7 CFR 910.100-910.180; 36 F.R. 17485) currently effective pursuant to the applicable provisions of the marketing agreement, as amended, and Order No. 910, as amended (7 CFR Part 910, 36 F.R. 9061), regulating the handling of fresh Lemons grown in Arizona and designated part of California, hereinafter referred to collectively as the "order." This is a regulatory program effective under the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601-674). The amendment to said rules and regulations was unanimously recommended by the Lemon Administrative Committee, established under said order as the agency to administer the terms and provisions thereof.

The proposal involves realignment of grower representation on said committee

as a result of changes in the affiliation (with handlers) of certain groups of growers. Under the order, grower membership on the committee is divided among representatives from three grower groups: The "co-op more than 60 percent" (the principal cooperative marketing organization); the "other co-ops;" and the "independents" who are growers unaffiliated with any cooperative marketing organization. On November 1, 1971, growers who operate three packinghouses changed their affiliation from "other co-ops" to independent handlers. Before the change, lemon production by all "independent" growers amounted to 4.35 percent of regulated shipments, based on regulated shipments during August 1, 1970, through July 31, 1971, as a representative period. As a result of the change, "independent" grower production amounts to 12.04 percent of regulated shipments when figured as a percent of regulated shipments during the representative period. Before the change lemon production by growers affiliated with "other co-ops" amounted to 11.24 percent of regulated shipments, based on regulated shipments during the representative period. As a result of the change, production by growers still affiliated with "other co-ops" amounts to 3.54 percent of regulated shipments when figured as a percent of regulated shipments during the period.

Therefore, the proposed realignment would change the grower member composition of the committee by (1) reducing the "other co-ops" representation from two grower members to one in District 2 and increasing the independent grower representatives from zero to one, and (2) reducing the "other co-ops" grower members from one to zero in District 3 and increasing the independent grower members from one to two. Representation of the principal co-operative marketing organization is not involved and total grower membership on the committee would remain unchanged at eight members. The proposed amendment would become effective 30 days after publication in the FEDERAL REGISTER.

The proposal is as follows:

A new § 910.120 *Change in grower representation*, is added reading as follows:

§ 910.120 Change in grower representation.

Pursuant to § 910.22(h) grower representative on the Lemon Administrative Committee for purposes of §§ 910.20 and 910.22 shall be as follows:

	Co-op more than 60 percent	Other co-ops	Independents
District 1.....	1	0	0
District 2.....	2	1	1
District 3.....	1	0	2

All persons who desire to submit written data, views, or arguments for consideration in connection with the proposed committee realignment, shall file the same, in quadruplicate, with the

Hearing Clerk, U.S. Department of Agriculture, Room 112, Administration Building, Washington, D.C. 20250, not later than the 10th day after publication of this notice in the FEDERAL REGISTER. All written submissions made pursuant to this notice will be made available for public inspection at the office of the Hearing Clerk during regular business hours (7 CFR 1.27(b)).

Dated: November 19, 1971.

FLOYD F. HEDLUND,
Director, Fruit and Vegetable
Division, Consumer and Marketing Service.

[FR Doc.71-17239 Filed 11-24-71; 8:50 am]

Consumer and Marketing Service

[7 CFR Part 914]

ORANGES GROWN IN THE INTERIOR DISTRICT IN FLORIDA

Notice of Proposed Rule Making

Notice is hereby given that the Department is considering a proposed amendment, as hereinafter set forth, of the rules and regulations (Subpart—Rules and Regulations; § 914.130; 36 F.R. 3801) currently in effect pursuant to the applicable provisions of the marketing agreement and Order No. 914 (7 CFR Part 914), regulating the handling of oranges grown in the Interior District in Florida, effective under the Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601-674).

The amendment of said rules and regulations was proposed by the Interior Orange Marketing Committee, established under said marketing agreement and order, as the agency to administer the terms and provisions thereof. Section 914.45 requires that the quantity of oranges which may be handled during any week shall be allocated between early and midseason type oranges and late type oranges on the basis of the respective percentages of weekly shipments of the two types of oranges during the preceding three fiscal periods. The proposed amendment is designed to put into effect the method for determining the allocation of the fixed quantity during the 1971-72 fiscal period by revising the table of shipment data to reflect the last three fiscal periods (1968-69 through 1970-71).

Therefore, it is proposed that the table following the introductory language of paragraph (b) of § 914.130 be amended to read as follows:

§ 914.130 Method of allocating fixed quantity.

• • • • •
(b) • • • • •

TABLE
[Percent]

Early and midseason type oranges in shipments for a given week	Two weeks later	Three weeks later
99	78	50
98	74	44
97	70	40
96	65	34
95	59	30
94	55	27
93	50	24
92	48	23
91	45	21
90	42	19
89	39	18
88	37	17
87	33	15
86	31	14
85	30	13
84	29	12
83	28	12
82	27	11
81	26	11
80	25	11
79	24	10
78	24	10
77	23	10
76	22	9
75	21	8
74	21	8
73	20	7
72	20	7
71	19	7
70	18	7
69	17	6
68	17	6
67	16	6
66	16	6
65	15	5
64	15	5
63	14	5
62	14	5
61	14	5
60	13	4
59	13	4
58	13	4
57	12	4
56	12	4
55	11	4
54	11	4
53	11	4
52	10	4
51	10	4
50	10	4
49	10	4
48	9	3
47	9	3
46	9	3
45	8	3
44	8	3
43	8	3
42	7	3
41	7	3
40	7	3
39	7	3
38	6	3
37	6	3
36	6	3
35	6	3
34	5	2
33	5	2
32	5	2
31	5	2
30	4	2
29	4	2
28	4	2
27	4	2
26	4	2
25	4	2
24	4	2
23	4	2
22	3	2
21	3	2
20	3	2
19	3	2
18	3	2
17	3	1
16	2	1
15	2	1
14	2	1
13	2	1
12	2	1
11	2	1
10	2	1
9	2	1
8	2	1
7	2	1
6	1	1
5	1	1
4	1	1
3	1	1
2	1	0
1	0	0

All persons who desire to submit written data, views, or arguments in connection with the proposed amendment should file the same, in quadruplicate, with the Hearing Clerk, U.S. Department of Agriculture, Room 112-A, Administration Building, Washington, D.C. 20250, not later than the 10th day after publication of this notice in the FEDERAL REGISTER. All written submissions made pursuant to this notice will be made available for public inspection at the Office of the Hearing Clerk during regular business hours (7 CFR 1.27(b)).

Dated: November 18, 1971.

PAUL A. NICHOLSON,
Deputy Director, Fruit and Vegetable Division, Consumer and Marketing Service.

[FR Doc.71-17118 Filed 11-24-71; 8:45 am]

DEPARTMENT OF LABOR

Occupational Safety and Health Administration

[29 CFR Part 1904]

RECORDING AND REPORTING OCCUPATIONAL INJURIES AND ILLNESSES

Proposed Statistical Reporting Program

Notice is hereby given of the proposed rules set forth below which would amend Part 1904 of Title 29, Code of Federal Regulations, in order to add thereto new rules prescribing certain statistical reporting requirements under the Williams-Steiger Occupational Safety and Health Act of 1970. Copies of proposed Occupational Injuries and Illnesses Survey, Form OSHA No. 103, are available for inspection at the regional offices of the Bureau of Labor Statistics and at the national office of the Bureau, General Accounting Office Building, 441 G Street NW., Washington, DC 20212.

Interested persons are invited to submit written data, views, and arguments concerning the proposed rules to the Office of Safety and Health Statistics, Bureau of Labor Statistics, 441 G Street NW., Washington, DC 20212, within 20 days following publication of this notice in the FEDERAL REGISTER. Any written comments which are not designated as confidential and otherwise exempt from public disclosure under 5 U.S.C. 552 may be inspected by any person upon written request.

Part 1904 of Title 29, Code of Federal Regulations, would be amended by adding thereto the following:

STATISTICAL REPORTING OF OCCUPATIONAL INJURIES AND ILLNESSES

§ 1904.20 Description of statistical program.

(a) Section 24 of the Act directs the Secretary of Labor, in consultation with the Secretary of Health, Education, and Welfare, to develop and maintain a program of collection, compilation, and

analysis of occupational safety and health statistics. The Commissioner of the Bureau of Labor Statistics has been subdelegated this authority by the Secretary of Labor. The program shall consist of periodic surveys of occupational injuries and illnesses. For the immediate future, such surveys shall cover all non-farm employments with a few limited exclusions such as government and mining.

(b) The sample design encompasses probability procedures, detailed stratification by industry and size, and a systematic selection within strata. Stratification and sampling will be carried out by State and other jurisdictions in order to provide the most efficient sample for eventual State estimates. Some industries will be sampled more heavily than others depending on the injury rate level based on previous experience. Nationally, the survey should produce adequate estimates for most four-digit Standard Industrial Classification (SIC) industries in manufacturing and for three-digit SIC classification in nonmanufacturing. In participating States where the sample size has been supplemented significantly, comparable estimates are possible.

§ 1904.21 Duties of employers.

Upon receipt of an Occupational Injuries and Illnesses Survey Form, OSHA No. 103,¹ the employer shall promptly complete the form in accordance with the instructions contained therein, and return it in accordance with the aforesaid instructions.

§ 1904.22 Effect of State plans.

Nothing in any State plan approved under section 18(c) of the Act shall affect the duties of employers to submit statistical report forms under § 1904.21 of this part.

(Secs. 8(g), 24, 84 Stat. 1600, 1615; 29 U.S.C. 657, 673; Secretary's Order No. 12-71, 36 F.R. 8754)

Signed at Washington, D.C., this 22d day of November 1971.

GEOFFREY H. MOORE,
Commissioner,
Bureau of Labor Statistics.

[FR Doc. 71-17274 Filed 11-24-71; 8:56 am]

DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT

[Docket No. R-71-150]

[24 CFR Parts 511, 541, 551, 561]

PROJECT SELECTION SYSTEM FOR CERTAIN COMMUNITY DEVELOPMENT PROGRAMS

Notice of Proposed Rule Making

Notice is hereby given that the Assistant Secretary for Community Development, under the authority contained in section 7(d) of the Department of Housing and Urban Development Act, 42 U.S.C. 3535(d), is considering the addi-

tion of new Parts 511, 541, 551, and 561 to Title 24 of the Code of Federal Regulations, as set forth below.

The proposed new Parts 511, 541, 551, and 561 would assist in the selection of project applications for funding under the Neighborhood Development Program, the Open Space Program (Legacy of Parks), the Neighborhood Facilities Program, and the Public Facility Loans Program.

These are four of seven basic programs now grouped under the umbrella of "Community Development" as part of a Departmental reorganization reflecting a basic change in the operation of the Department in order to subordinate "program" to "purpose."

The Department's purpose, the delivery of essential Community Development resources and assistance to areas of need, without regard to size of the community in the face of demand which exceeds the supply, can be most effectively achieved through use of a rational system which identifies eligible projects which best meet Community Development goals established by this Department.

The Community Development Project Selection Systems will be used to allocate scarce resources and assistance quickly and fairly for the maximum benefit of the hard pressed urban and rural areas of this country. These systems will identify those projects for early funding decisions which do more than the bare minimum needed to qualify an applicant under a particular statute. Priority systems such as these are necessary tools for allocation of resources to those projects which deliver the most to areas of greatest need. In addition these Project Selection Systems further the objective of annual funding. The purpose is to make those decisions fairly, equitably, and openly.

Project applications will be reviewed in the HUD Area Office by a team consisting of appropriate Community Development staff and technical experts.

Funding will be made available only after three distinct review activities occur. First, the application will be judged against statutory related prerequisites to eliminate clearly inappropriate proposals or clearly ineligible projects; second, the application, if it meets the prerequisite test, will be evaluated against certain numerically rated criteria and ranked among all applications for a particular fiscal quarter; third, those applications ranked high enough to justify further processing in accordance with established procedures will then be reviewed for technical compliance with all relevant statutory requirements including those for which a preliminary judgment was made as to apparent eligibility in the prerequisite review. No funding commitments will be made until after these technical compliance reviews are completed.

Staff judgments will be based on information submitted by the applicant as well as information secured from Area Offices/local staff discussion and site visits. At the end of each fiscal quarter all applicants will receive notice as to

the status of their application with HUD (either approved contingent on fully meeting statutory requirements, or rejected). This notification will contain an explanation for rejection, in those cases where an application is not approved. Applicants whose projects receive conditional approval will be required to submit any needed technical supplemental information within 60 days or lose the conditional fund assurance.

The numerical ranking process will be used to select those applications which are superior in terms of meeting program goals. Criteria rate the locality's need for the project, and ability to coordinate and carry out the project, as well as rating the project itself.

A positive response on each statement for which points are awarded will result in the awarding of the assigned number of points. In several instances a judgment is called for between "good" and "superior" with the point total differentiated accordingly.

Interested persons are invited to participate in the making of the proposed rule by submitting written data, views, or statements with regard to the proposed regulations. Communications should identify the proposed rule by the above title and should be filed in triplicate with the Rules Docket Clerk, Office of General Counsel, Department of Housing and Urban Development, Washington, D.C. 20410. All relevant material received on or before December 27, 1971, will be considered by the Secretary before taking action on the proposal. Copies of comments submitted will be available during business hours, both before and after the specified closing date, at the above address, for examination by interested persons. Environmental statements concerning the impact of these project selection systems can be purchased from the National Technical Information Service, Department of Commerce, Springfield, Va. 22151.

Accordingly, Chapter V of Title 24 of the Code of Federal Regulations is proposed to be amended by adding new Parts 511, 551 and 561 to read as follows:

PART 511—PROGRAM PROJECT SELECTION SYSTEM FOR THE NEIGHBORHOOD DEVELOPMENT PROGRAM

Sec.	Scope.
511.1	Definitions.
511.2	Program prerequisites.
511.4	Criteria for evaluating applications.
511.6	Local effort and coordination.
511.8	Impact of area selected.
511.10	Program management capacity.
511.12	Local equal employment and entrepreneurial effort.
511.14	Local need.
511.16	Commitment of local, State, and Federal entities to project or program.
511.18	Expansion of housing for low- and moderate-income families.
511.20	Community development.

AUTHORITY: The provisions of this Part 511 issued under secs. 131-134, of the Housing Act of 1949, as amended, 82 Stat. 518-520; 42 U.S.C. 1469-1469c.

¹ Filed as part of the original document.

§ 511.1 Scope.

(a) *Purpose.* This part sets forth criteria and procedures to be used in preliminary evaluation of applications for Federal loan and grant assistance to local public bodies and agencies for Neighborhood Development Programs, which are urban renewal undertakings and activities, in one or more urban renewal areas, that are planned and carried out on the basis of annual increments.

(b) *Procedures.* Submissions will first be reviewed against six prerequisites. If any of these prerequisites are not met, the application will be rejected. If the application appears to meet the prerequisites, it will be evaluated against the point rated criteria and assigned a point rating. The application will then be rejected or processed further according to its point rating as compared with the point ratings of other competing applications. This evaluation will not result in a final decision to extend loan and grant assistance to particular Neighborhood Development Program projects. Such decision will be made only after a full technical review of applications for compliance with all relevant statutory requirements.

§ 511.2 Definitions.

As used in the regulations in this part:

(a) "Applicant" means a local public agency as defined under sec. 110(h) of the Housing Act of 1949; 63 Stat. 413, 421; 42 U.S.C. 1460(h).

(b) "City Demonstration Agency" means that agency which was required to be established under title I of the Demonstration Cities and Metropolitan Development Act of 1966, 80 Stat. 1255, 42 U.S.C. 3301, to carry out a Model Cities program at the local level.

(c) "Locality" means the political jurisdiction or jurisdictions having general purpose government powers upon whose behalf the application for funding has been submitted.

(d) "Low and moderate income" means an income level which is less than the maximum income eligibility level for a family of four under either of the subsidized housing programs authorized by section 235 or 236 of the National Housing Act, as amended, 82 Stat. 476, 477, 498, 12 U.S.C. 1715Z, 1715Z-1.

(e) "Low- and moderate-income housing" refers to housing with a fair market value that is equal to or less than the resultant of multiplying the section 235-236 maximum income for a family of four, as established by the Secretary for the county in which the project is located, by a factor of 3. "Low- and moderate-income housing" also refers to housing with an annual rental equal to or less than one-third of such section 235-236 maximum income.

(f) "Model neighborhood" means that geographical area in which funds are being spent under a program authorized by title I of the Demonstration Cities and Metropolitan Development Act of 1966, 80 Stat. 1255, 42 U.S.C. 3301.

(g) "NDP area" means the area or areas in which urban renewal project ac-

tivities are taking place or are to take place under a neighborhood development program.

(h) "Renewal experience" means those renewal efforts and activities carried out under one or more urban renewal projects under sec. 110(c) of the Housing Act of 1949, as amended, 63 Stat. 413, 414; 42 U.S.C. 1450; or a Neighborhood Development Program as described in sections 131-134 of said Housing Act.

(i) "Service area" has the same definition as NDP area above.

§ 511.4 Program prerequisites.

For the Neighborhood Development Program there are the following six prerequisites:

(a) *Workable program.* The presence of a certified or certifiable Workable Program pursuant to section 101(c) of the Housing Act of 1949, as amended, Public Law 81-171, 63 Stat. 413; U.S.C. 1451c. By "certifiable workable program" is meant a reasonable probability of certification or recertification based upon submitted materials and local progress towards meeting certification standards and conditions as indicated in HUD's Handbook for the Workable Program, RHA 7100.

(b) *Local general plan.* The presence of a local general plan, and conformance of the project thereto. A "local general plan" is defined as an official document or documents containing a land use plan, thoroughfare plan, community facilities plan, public improvement program, zoning ordinance and map, and subdivision regulations so interrelated that taken together they serve as a comprehensive guide for the physical development of the locality as a whole. The plan must have been approved by the local governing body of the locality in which the NDP is proposed.

(c) *Civil rights.* Submission of acceptable assurances of compliance with title VI of the Civil Rights Act of 1964, Public Law 88-352, 78 Stat. 252, 42 U.S.C. 2000d and HUD title VI regulations 24 CFR Part I, 29 F.R. 16280 and with affirmative action plan requirements pursuant to Executive Order 11246, as amended 30 F.R. 12319, and HUD regulations 24 CFR Part 8, 36 F.R. 20688.

(d) *Relocation requirements.* Absence of any known impediment to the locality's ability to meet relocation requirements and fulfill requirements for replacement housing. "Known impediment" refers to both a legal inability to comply with title I of the Housing Act of 1949 as amended, Public Law 81-171, 63 Stat. 413, 414, 42 U.S.C. 1450, et seq., or the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, 84 Stat. 1894, 42 U.S.C. 4601, or other statutory requirements and a practical inability to provide adequate relocation assistance and replacement housing.

(e) *A-95 coordination.* Evidence that A-95 coordination is in process. The phrase "A-95 coordination" refers to the procedure involving review of applications by the appropriate agency designated under OMB Circular A-95.

(f) *Housing component.* Absence of any known barrier to an adequate or better rating on the Housing Production and Mortgage Credit Project Selection System (36 F.R. 19316-20, Oct. 2, 1971) for any subsidized housing required to meet the housing component for the program.

§ 511.6 Criteria for evaluating applications.

Criteria for evaluating applications are divided into the following major categories:

- (a) Local effort and coordination;
- (b) Impact of area selected;
- (c) Program management capacity;
- (d) Local equal employment effort;
- (e) Local need;
- (f) Commitment of local, State, and Federal entities to project or program;
- (g) Expansion of housing for low- and moderate-income families;
- (h) Community development.

The elements considered in each category are described in the following sections, and the method of assigning rating points to each element or category is set forth. Points are awarded to each element or category in the following manner unless otherwise specifically indicated: If a statement under a particular element or category applies specifically to the project application under consideration, the application is awarded the number of points assigned to that statement. If no statement applies, no points are awarded to the application for that element.

§ 511.8 Local effort and coordination.

(The value of this category is the sum of the values of paragraphs (a) and (b) of this section.)

(a) *Budget and capital improvement plan.* All necessary project related public improvements, facilities, and services are identified in the appropriate local budgets and capital improvements plan, except those included in project costs 5

(b) *Model cities.* The NDP area is in whole or in part a Model Neighborhood, and there exists a statement by the City Demonstration Agency Director that the activities for which funding is requested are consistent with the goals and objectives of the Model Neighborhood plan 5

§ 511.10 Impact of area selected.

(The value of this category is the sum of the values of paragraphs (a) to (d) of this section.)

(a) *Rehabilitation of substandard residential units.* Seventy-five percent of the existing substandard residential units in the NDP area will be rehabilitated, and 75 percent of the total units will be retained 7

"Substandard residential units" refer to those residential units which are out of compliance with the appropriate local housing and building codes.

(b) *Redevelopment areas.* The NDP area is in a designated redevelopment area as defined by the Public Works and Economic Development Act of 1965, as

amended Public Law 89-136, 79 Stat. 552, 42 U.S.C. 3121, and the program shows evidence of conformance to the Overall Economic Development Plan for that area ----- 4

(c) *Environmental deficiencies.* The locality is taking active steps (including those proposed under the NDP) to eliminate environmental deficiencies in the NDP area, including but not limited to any among those listed below:

- (1) Overcrowding of land.
- (2) Substantial substandard housing.
- (3) Lack of open space.
- (4) Transportation (including parking) deficiencies.
- (5) Inadequate public facilities, including water and sewer.
- (6) Incompatible land uses.
- (7) Incompatible types of building uses.
- (8) Underutilized land ----- 4

(d) Expansion of low- and moderate-income housing. The program contributes to the realistic plan referred to in § 511.20(b) ----- 4

§ 511.12 Program management capacity.

(The value of this category is the sum of the values of either paragraphs (a) or (b) of this section. For purposes of this section, 4 points equals good, 8 points equals superior.)

(a) *Locality that has had previous renewal experience.* (The value of this element is the sum of subparagraphs (1) and (2) of this paragraph.)

(1) There is consistency between past project(s) results and relevant project objectives ----- 4 or 8

(2) Since July 1, 1968, there has been a reasonable relationship between past initial cost and time commitments and actual cost and development time. 4 or 8

(b) *Locality that is without previous renewal experience.* (The value of this element is the sum of subparagraphs (1), (2), and (3) of this subparagraph.)

(1) The applicant is organizationally part of a local general purpose government ----- 4

(2) There is a likelihood of successful execution and completion of the proposed NDP, based on the relationship to the proposed NDP activities of the following factors:

- (i) Administrative budget.
- (ii) Time phasing for critical events.
- (iii) Staff assignments.
- (iv) Budgeted activities of other local agencies ----- 4 or 8

(3) Either the locality's performance with other HUD programs in the last 3 years was satisfactory in all programs, or

For localities without other HUD program experience, the locality's performance in its public development efforts during the last 3 years was satisfactory ----- 4

§ 511.14 Local equal employment and entrepreneurial effort.

(The value of this category is the sum of the values of either paragraphs (a) or (b) of this section.)

(a) *If locality has had previous renewal experience.* (Value of this element

is the sum of the values of subparagraphs (1) to (3) of this paragraph.)

(1) Activities undertaken by the locality have provided relatively superior opportunities for training and/or employment, of minority persons ----- 3

(2) Activities undertaken by the locality have provided relatively superior opportunities for business concerns owned, controlled or managed in substantial part by minority persons ----- 3

(3) The applicant has taken affirmative action in its own employment in the hiring, training, etc., of minority persons, with relatively superior results ----- 4

(b) *If locality is without previous renewal experience.* (Value of this element is the sum of the values of subparagraphs (1) and (2) of this paragraph.)

(1) Activities undertaken by the locality have provided relatively superior opportunities for training and/or employment of minority persons ----- 5

(2) Activities undertaken by the locality have provided relatively superior opportunities for business concerns owned, controlled, or managed in substantial part by minority persons ----- 5

In determining whether or not performance has been "relatively superior" the following items will be taken into consideration: Absolute numbers of persons actually trained or hired in relation to numbers of minority group persons in the labor market area; total dollar value of contracts let to minority entrepreneurs in relation to total dollar amount of contracts let by locality; within the administering agency, racial composition at all levels of employment and absolute number of training opportunities made available to minority group persons.

§ 511.16 Local need.

(The value of this category is the sum of the values of paragraphs (a) and (b) of this section.)

(a) *Median income of jurisdiction.* The median annual family income of the geographic area of jurisdiction of the applicant compared to the State median annual family income is: (Select one, if appropriate):

- (1) \$1-\$500 below State median ---- 4
- (2) More than \$500 below State median ----- 8

(b) *Median income of service area.* The median annual family income of the service area compared to the State annual median family income is: (Select one if appropriate):

- (1) \$1-\$500 below State median ---- 4
- (2) More than \$500 below State median ----- 8

Median family incomes for the service area and the State are to be obtained by utilizing the City-County Data Book or other census data if possible. Or use best available data.

§ 511.18 Commitment of local, State, and Federal entities to project or program.

(The value of this category is the sum of paragraphs (a) to (d) of this section.)

(a) *Local commitment.* There was substantial participation by the chief ex-

ecutive and local governing body during the planning of the project, and they are demonstrating current public commitment in support of the project. ----- 4

(b) *Resident commitment.* There was effective widespread participation of a representative spectrum of residents in the development of project objectives and there is evidence of current support for the execution of the project. ----- 4

(c) *Coordination of resources.* There was substantial participation of other local agencies during planning, and there is a current commitment including resources, from State, county, or local entities other than those necessary to satisfy the local share requirement. ----- 4

(d) *Participation in areawide or metropolitan planning.* There is active participation by the locality's representatives in the areawide or metropolitan planning organization ----- 3

§ 511.20 Expansion of housing for low- and moderate-income families.

(The value of this category is the sum of paragraphs (a) and (b) of this section.)

(a) *Expansion within applicant's jurisdiction.* Within the applicant's geographic area of jurisdiction, there has been significant expansion of the supply of standard housing for low- and moderate-income families in a nondiscriminatory way ----- 6

(b) Dispersion of low and moderate income housing. The locality has a realistic plan to expand the supply of standard low and moderate income housing in a nondiscriminatory way outside areas of concentration of economically disadvantage or minority citizens. ----- 4

§ 511.22 Community development.

The project is necessary for undertaking other publicly supported community development activities ----- 0 to 4

"Community development activities" refers to those publicly supported physical development activities and those related social or economic development activities being carried out or to be carried out within a reasonable period of time in accordance with a locally determined or areawide plan or strategy. Factors taken into consideration may include the project's responsiveness to local needs and objectives, the economics possible through coordinated or joint action, the degree of support by the appropriate unit(s) of local general-purpose government, and the management capacity within local general-purpose government.

PART 541—OPEN SPACE PROGRAM (LEGACY OF PARKS) PROJECT SELECTION SYSTEM

- | | |
|--------|--|
| Sec. | |
| 541.1 | Scope. |
| 541.2 | Definitions. |
| 541.4 | Program prerequisites. |
| 541.6 | Criteria for evaluating applications. |
| 541.8 | Local effort and coordination. |
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Sec.

- 541.14 Local need.
 541.16 Commitment of local, State, and Federal entities to project or program.
 541.18 Expansion of housing for low- and moderate-income families.
 541.20 Community development.

AUTHORITY: The provisions of this Part 541 issued under title IV, of the Housing Act of 1961, as amended, Public Law 91-609, 84 Stat. 1781; 42 U.S.C. 1500.

§ 541.1 Scope.

(a) *Purpose.* This part sets forth criteria and procedures to be used in preliminary evaluation of applications for Federal grant assistance to local public bodies and agencies for the Open Space Program (Legacy of Parks).

(b) *Procedures.* Submissions will first be reviewed against five prerequisites. If any of these prerequisites are not met, the application will be rejected. If the application meets all prerequisites, it will be evaluated against the point rated criteria and assigned a point rating. The application will then be rejected or processed further according to its point rating as compared with the point ratings of other competing applications. This evaluation will not result in a final decision to extend grant assistance to particular Open Space projects. Such decision will be made only after a full technical review of applications for compliance with all relevant statutory requirements.

§ 541.2 Definitions.

As used in the regulations in this part:

(a) "City Demonstration Agency" means that agency which was required to be established under title I of the Demonstration Cities and Metropolitan Development Act of 1966, 80 Stat. 1255, 42 U.S.C. 3301, to carry out a Model Cities program at the local level.

(b) "Locality" means the political jurisdiction or jurisdictions having general-purpose government powers upon whose behalf the application for funding has been submitted.

(c) "Low and moderate income" means an income level which is less than the maximum income eligibility level for a family of four for the county in which the project is to be located under either of the subsidized housing programs authorized by section 235 or 236 of the National Housing Act, as amended 82 Stat. 476, 477, 498; 12 U.S.C. 17152, 17152-1.

(d) "Low- and moderate-income housing" refers to housing with a fair market value that is equal to or less than the resultant of multiplying the section 235-236 maximum income for a family of four, as established by the Secretary for the county in which the project is located, by a factor of 3. "Low- and moderate-income housing" also refers to housing with an annual rental equal to or less than one-third of such section 235-236 maximum income.

(e) "Model neighborhood" means that geographical area in which funds are being spent under a program author-

ized by title I of the Demonstration Cities and Metropolitan Development Act of 1966, 80 Stat. 1255, 42 U.S.C. 3301.

§ 541.4 Program prerequisites.

For the Open Space Program (Legacy of Parks) there are the following five prerequisites:

(a) *Certified areawide planning jurisdiction.* The locality is in a certified areawide planning jurisdiction. For definition of "certified areawide planning jurisdiction" see HUD Circular 6415.1A and 6415.3.

(b) *Civil rights.* Submission of acceptable assurances of compliance with title VI of the Civil Rights Act of 1964, Public Law 88-352, 78 Stat. 252, 42 U.S.C. 2000d and HUD title VI regulations 24 CFR Part I, 29 F.R. 16280 and with affirmative action plan requirements pursuant to Executive Order 11246, as amended 30 F.R. 12319, and HUD regulations 24 CFR Part 8, 36 F.R. 20688.

(c) *Relocation.* Absence of any known impediment to the locality's ability to meet relocation requirements.

"Known impediment" refers to both a legal inability to comply with title I of the Housing Act of 1949, as amended, Public Law 81-171; 63 Stat. 413, 414, 42 U.S.C., 1450, or the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, 84 Stat. 1894, 42 U.S.C. 4601, or other statutory requirements and a practical inability to provide adequate relocation assistance.

(d) *A-95 coordination.* Evidence that A-95 coordination is in process. The phrase "A-95 coordination" refers to the procedure involving review of applications by the appropriate agency designated under OMB Circular A-95.

(e) *National Register of Historic Places.* For historic and architectural preservation assistance the project must involve property or open space land which is listed on the National Register of Historic Places. The "National Register of Historic Places" is a record of culturally significant property maintained by the National Park Service, U.S. Department of the Interior. See section 106 of the Historic Preservation Act of 1966, Public Law 89-665, 80 Stat. 915; 16 U.S.C. 470.

§ 541.6 Criteria for evaluating applications.

Criteria for evaluating applications are divided into the following major categories:

- (a) Local effort and coordination;
 (b) Projects ability to meet open space needs;
 (c) Local equal employment effort;
 (d) Local need;
 (e) Commitment of local, State, and Federal entities to project or program;
 (f) Expansion of housing for low- and moderate-income families;
 (g) Community development.

The elements considered in each category are described in the following sections, and the method of assigning rating points to each element or category is set forth. Points are awarded to each element or category in the following manner

unless otherwise specifically indicated. If a statement under a particular element or category applies specifically to the project application under consideration, the application is awarded the number of points assigned to that statement. If no statement applies, no points are awarded to the application for that element.

§ 541.8 Local effort and coordination.

(The value of this category is the sum of the values of paragraphs (a) to (d) of this section.)

(a) *Budget and capital improvement plan.* All necessary project related public improvements, facilities, and services are identified in the appropriate local budgets and capital improvement plan, except those included in projects costs ----- 4

(b) *Model Cities.* The project area in whole or in part is in a Model Neighborhood and there exists a statement by the City Demonstration Agency Director that the activities for which funding is requested are consistent with the goals and objectives of the Model Neighborhood's plan ----- 3

(c) *Local regulatory measures.* The project is coordinated with other programs and regulations to improve the quality of the environment, as evidenced by the fact that the locality has adopted and is enforcing regulatory measures to reduce blight and decay and to preserve and promote open space and historic resources at minimum cost. These regulatory measures must include at least three of the following:

- (1) Requirements for undergrounding of utilities;
 (2) Adoption and enforcement of litter control, weed abatement, or sign control;
 (3) Subdivision regulations requiring open space dedication;
 (4) Cluster zoning or planned unit developments; "Cluster Zoning or Planned Unit Development" are regulations enacted by the locality that encourage the grouping and placement of structures in such a manner as to create or reserve open space.

(5) Relaxation of set-back and height controls to provide Open Space in core areas;

(6) Ordinances to protect historic sites and buildings ----- 4

(d) *Low- and moderate-income housing.* The project is related to and coordinated with the provision of low- and moderate-income housing ----- 4

§ 541.10 Projects ability to meet open space needs.

(The value of this category is the sum of paragraphs (a) to (f) of this section.)

(a) *Environment.* Effect on the environment (The value of this section is the sum of subparagraphs (1) to (6) of this paragraph.)

(1) The project will prevent or remedy urban blight or deterioration ----- 2

(2) The project will help curb urban sprawl or prevent incompatible development ----- 2

"Urban sprawl" refers to random and unguided development outward from

urban centers. It is usually characterized by groups of large scale, low density residential development, interspersed and surrounded by commercial and industrial development. Projects that can help alleviate and curb urban sprawl are projects designed to guide large scale growth, or act as a buffer by separating existing land uses. "Incompatible development" refers to undesirable and hazardous development of flood plains, steep slopes, faults, or any other similarly unsuited area.

(3) The project will remedy deficiency of open space..... 2

"Deficiency of Open Space" means that there is less than 2.5 acres of existing public open space per thousand population.

(4) The project preserves ecologically significant areas or conserves scenic areas 1

"Ecologically significant" refers to unusual, specific, resource-oriented open space areas such as wildlife sanctuaries, geysers, waterfalls, wet lands, and sand dunes.

(5) The project involves more than one type of environmental improvement activity 1

"Environmental improvements" are those development activities, excluding park development, designed to improve the overall appearance of a locality or neighborhood. These activities are designed to prevent community blight and decay, and can include street tree planting, redesigning street furniture, and improving pathways.

(b) *Population served.* The project will readily serve a substantial number of low and moderate income residents. 7

(c) *Patterns of urban growth.* The project involves undeveloped or predominately undeveloped land which, if withheld from commercial, industrial, and residential development, would have special significance in helping to shape desirable patterns of urban growth. 5

(d) *Danger of loss.* The project site is in imminent danger of loss. 3

"Imminent Danger of Loss" means that the project is threatened by action which will prevent the use of the area or property for open space or historic preservation purposes.

(e) *Historic preservation.* The project is a historic building involving an adaptive use such as community center, senior center, information center, citizen's meeting hall, or any such use that meets a specific need in the community it serves 2

(f) *Program experience.* If applicant had previous federally assisted program experience:

The applicant has expeditiously acquired and developed properties, sponsors programs for its use, and operates them in accordance with contract conditions 5

or

If the applicant is without federally assisted program experience:

The applicant has well maintained public open spaces, sponsors programs for their use,

and operates those programs in a nondiscriminatory manner..... 5

§ 541.12 Local equal employment and entrepreneurial effort.

(The value of this category is the sum of the values of either paragraphs (a) or (b) of this section.)

(a) *If locality has had previous federally assisted open space experience.* (Value of this element is the sum of the values of subparagraphs (1) to (3) of this paragraph.)

(1) All activities undertaken by the locality have provided relatively superior opportunities for training and/or employment, of minority persons..... 3

(2) All activities undertaken by the locality have provided relatively superior opportunities for business concerns owned, controlled, or managed in substantial part by minority persons. 3

(3) The applicant has taken affirmative action in its own employment in the hiring, training, etc., of minority persons, with relatively superior results. 4

(b) *If locality has not had previous federally assisted open space experience:* (Value of this element is the sum of the values of subparagraphs (1) and (2) of this paragraph.)

(1) Activities undertaken by the locality have provided relatively superior opportunities for training and/or employment of minority persons..... 5

(2) Activities undertaken by the locality have provided relatively superior opportunities for business concerns owned, controlled, or managed in substantial part by minority persons. In determining whether or not performance has been "relatively superior", the following items will be taken into consideration: Absolute numbers of persons actually trained or hired in relation to numbers of minority group persons in the labor market area; total dollar value of contracts let to minority entrepreneurs in relation to total dollar amount of contracts let by locality; within the administering agency, racial composition at all levels of employment and absolute number of training opportunities made available to minority group persons. 5

§ 541.14 Local need.

(The value of this category is the sum of the values of paragraphs (a) and (b) of this section.)

(a) *Median income of jurisdiction.* The median annual family income of the geographic area of jurisdiction of the applicant compared to the State median annual family income is: (Select one, if appropriate):

(1) \$1-\$500 below State median.... 4
(2) more than \$500 below State median 8

(b) *Median income of service area.* The median annual family income of the service area compared to the State annual median family income is: (Select one if appropriate):

(1) \$1-\$500 below State median.... 4
(2) more than \$500 below State median 8

Median family incomes for the service area and the State are to be obtained by

utilizing the City County Data Book or other census data if possible. Or use best available data.

§ 541.16 Commitment of local, State, and Federal entities to project or program.

(The value of this category is the sum of paragraphs (a) to (d) of this section.)

(a) *Local commitment.* There was substantial participation by the chief executive and local governing body during the planning of the project, and they are demonstrating current public commitment in support of the project. 4

(b) *Resident commitment.* There was effective widespread participation of a representative spectrum of residents in the development of project objectives and there is evidence of current support for the execution of the project. 4

(c) *Coordination of resources.* There was substantial participation of other local agencies during planning, and there is a current commitment including resources, from State, county, or local entities other than those necessary to satisfy the local share requirement. 4

(d) *Participation in areawide or metropolitan planning.* There is active participation by the locality's representatives in the areawide or metropolitan planning organization. 3

§ 541.18 Expansion of housing for low- and moderate-income families.

(The value of this category is the sum of paragraphs (a) and (b) of this section.)

(a) *Expansion of low- and moderate-income housing.* Within the applicant's geographic area of jurisdiction, there has been significant expansion of the supply of standard housing for low- and moderate-income families in a nondiscriminatory way. 6

(b) *Dispersion of low- and moderate-income housing.* The locality has a realistic plan to expand the supply of standard low- and moderate-income housing in a nondiscriminatory way outside areas of concentration of economically disadvantaged or minority citizens. 4

§ 541.20 Community development.

The degree to which the project is necessary for undertaking other publicly supported community development activities. 0 to 4

"Community development activities" refers to those publicly supported physical development activities and those related social or economic development activities being carried out or to be carried out within a reasonable period of time in accordance with a locally determined or areawide plan or strategy. Factors taken into consideration may include the project's responsiveness to local needs and objectives, the economies possible through coordinated or joint action, the degree of support by the appropriate unit(s) of local general-purpose government, and the management capacity and efforts to develop management capacity within local general-purpose government.

PART 551—NEIGHBORHOOD FACILITIES PROGRAM PROJECT SELECTION SYSTEM

Sec.
551.1 Scope.
551.2 Definitions.
551.4 Program prerequisites.
551.6 Criteria for evaluating applications.
551.8 Relationship to comprehensive planning.
551.10 Income level of area to be served.
551.12 Relevance of program objectives.
551.14 Capacity to administer the Neighborhood Facility.
551.16 Local equal employment and entrepreneurial effort.
551.18 Local need.
551.20 Commitment of local, State, and Federal entities to project or program.
551.22 Expansion of housing for low- and moderate-income families.
551.24 Community development.

AUTHORITY: The provisions of this Part 551 issued under sec. 703, of the Housing and Urban Development Act of 1965, 79 Stat. 491; 42 U.S.C. 3103.

§ 551.1 Scope.

(a) *Purpose.* This part sets forth criteria and procedures to be used in preliminary evaluation of applications for Federal grant assistance to local public bodies and agencies for Neighborhood Facilities Grant Projects.

(b) *Procedures.* Submissions will first be reviewed against five prerequisites. If any of these prerequisites are not met, the application will be rejected. If the application meets all prerequisites, it will be evaluated against the point rated criteria and assigned a point rating. The application will then be rejected or processed further according to its point rating as compared with the point ratings of other competing applications. This evaluation will not result in a final decision to extend grant assistance to particular Neighborhood Facilities projects. Such decision will be made only after a full technical review of applications for compliance with all relevant statutory requirements.

§ 551.2 Definitions.

As used in the regulations in this part:
(a) "Locality" means the political jurisdiction or jurisdictions having general-purpose government powers upon whose behalf the application for funding has been submitted.

(b) "Low and moderate income" means an income level which is less than the maximum income eligibility level for a family of four for the county in which the project is to be located under either of the subsidized housing programs authorized by section 235 or 236 of the National Housing Act, as amended, 82 Stat. 476, 477, 498, 12 U.S.C. 1715Z, 1715Z-1.

(c) "Low- and Moderate-Income Housing" refers to housing with a fair market value that is equal to or less than the resultant of multiplying the section 235-236 maximum income for a family of four, as established by the Secretary, for the county in which the project is located, by a factor of 3. "Low- and Moderate-Income Housing" also refers to

housing with an annual rental equal to or less than one-third of such section 235-236 maximum income.

§ 551.4 Program prerequisites.

For the Neighborhood Facilities Grant Program there are the following five prerequisites:

(a) *Relocation.* Absence of any known impediment to the locality's ability to meet relocation requirements.

"Known impediment" refers to both a legal inability to comply with title I, Housing Act of 1949, as amended, Public Law 81-171; 63 Stat. 413, 414, 42 U.S.C. 1450, or the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, 84 Stat. 1894, 42 U.S.C. 4601, or other statutory requirements and a practical inability to provide adequate relocation assistance.

(b) *Civil rights.* Submission of acceptable assurances of compliance with title VI of the Civil Rights Act of 1964, Public Law 88-352, 78 Stat. 252, 42 U.S.C. 2000d and HUD Title VI regulations 24 CFR Part I, 29 F.R. 16280 and with affirmative action plan requirements pursuant to Executive Order 11246, as amended 30 F.R. 12319, and HUD regulations 24 CFR Part 8, 36 F.R. 20688.

(c) *Area to be served.* The area to be served by the facility is reasonable in relationship to the services to be provided, and the design and capacity of the proposed facility.

(d) *Project location.* The project is so located as to be available for use by a significant portion (or number in the case of large urban places) of the area's low- and moderate-income residents.

§ 551.6 Criteria for evaluating applications.

Criteria for evaluating applications are divided into the following major categories:

- (a) Relationship to comprehensive planning;
- (b) Income level of area to be served;
- (c) Relevance of program objectives;
- (d) Capacity to administer the neighborhood facility;
- (e) Local equal employment effort;
- (f) Local need;
- (g) Commitment of local, State, and Federal entities to project or program;
- (h) Expansion of housing for low- and moderate-income families;
- (i) Community development;

The elements considered in each category are described in the following sections, and the method of assigning rating points to each element or category is set forth. Points are awarded to each element or category in the following manner unless otherwise specifically indicated: If a statement under a particular element or category applies specifically to the project application under consideration, the application is awarded the number of points assigned to that statement. If no statement applies, no points are awarded to the application for that element.

§ 551.8 Relationship to comprehensive planning.

(The value of this category is the value of paragraph (a).)

(a) *General plan.* The proposed facility is specifically identified in the locality's general plan..... 5

§ 551.10 Income level of area to be served.

(The value of this category is the value of paragraphs (a), (b), or (c) of this section, as applicable.)

(a) *Population served.* On the basis of 1970 Census data, 40-49 percent of the families whose needs are proposed to be served by the facility are low- and moderate-income families..... 5

"Low- and moderate-income" is defined in § 551.2(b).

(b) *Population served.* On the basis of 1970 Census data, 50-59 percent of the families whose needs are proposed to be served by the facility are low- and moderate-income families..... 10

(c) *Population served.* On the basis of 1970 Census data, 60 percent or over of the families whose needs are proposed to be served by the facility are low- and moderate-income families..... 14

§ 551.12 Relevance of program objectives.

(The value of this category is the sum of paragraphs (a) to (c) in this section.)

(a) *Accessibility to low- and moderate-income persons.* The proposed facility will be made readily accessible to low- and moderate-income persons outside the immediate neighborhood..... 3

(b) *Provision of community service.* The proposed facility will provide a program of community services to meet identified needs of low- and moderate-income families and individuals where present service and facilities do not exist..... 8

(c) *Coordination of existing services.* The proposed Neighborhood Facility Program will coordinate and extend existing health, recreation, social or similar community services to meet the identified needs of the population of the area to be served..... 5

"Identified Needs" refer to those priority needs determined by the applicant with the participation of the community residents whose needs are to be served.

§ 551.14 Capacity to administer the Neighborhood Facility.

(The value of this category is the sum of paragraphs (a) and (b) of this section.)

(a) *Local commitment.* The locality has committed core staff and funds to operate the proposed facility..... 5

"Core Services" (central administrative services) cover such activities as:

- (1) Coordination of services, including hiring of a center director;
- (2) Outreach;
- (3) Intake, referral, and follow-through;
- (4) Information development and dissemination;

(5) Maintenance of central record-keeping system;

(6) Community organization.

(b) *Program experience.* (1) If locality has had prior federally assisted Neighborhood Facilities Grant Program experience:

The locality has expeditiously put in operation such facilities and operated them in accordance with contract conditions..... 5

OR

(2) If the locality is without federally assisted Neighborhood Facilities Grant Program experience:

The applicant has adequately maintained public facilities on a neighborhood basis and operated them in a nondiscriminatory manner..... 5

§ 551.16 Local equal employment and entrepreneurial effort.

(The value of this category is the sum of the values of either paragraphs (a) or (b) of this section.)

(a) *If locality has previously received financial funding under the Neighborhood Facilities Program.* (Value of this element is the sum of the values of subparagraphs (1) to (3) of this paragraph.)

(1) Activities undertaken by the locality have provided relatively superior opportunities for training and/or employment, of minority persons..... 3

(2) Activities undertaken by the locality have provided relatively superior opportunities for business concerns owned, controlled or managed in substantial part by minority persons..... 3

(3) The applicant has taken affirmative action in its own employment in the hiring, training, etc., of minority persons, with relatively superior results... 4

(b) *If locality has not previously received financial funding under the Neighborhood Facilities Program.* (Value of this element is the sum of the values of subparagraphs (1) and (2) of this paragraph.)

(1) Activities undertaken by the locality have provided relatively superior opportunities for training and/or employment of minority persons..... 5

(2) Activities undertaken by the locality have provided relatively superior opportunities for business concerns owned, controlled, or managed in substantial part by minority persons.

In determining whether or not performance has been "relatively superior", the following items will be taken into consideration: Absolute numbers of persons actually trained or hired in relation to numbers of minority group persons in the labor market area; total dollar value of contracts let to minority entrepreneurs in relation to total dollar amount of contracts let by locality; within the administering agency, racial composition at all levels of employment and absolute number of training opportunities made available to minority group persons... 5

§ 551.18 Local need.

(The value of this category is the sum of the values of paragraphs (a) and (b) of this section.)

(a) *Median income of jurisdiction.* The median annual family of the geographic

area of jurisdiction of the applicant compared to the State median annual family income is: (Select one, if appropriate):

(1) \$1-\$500 below State median..... 4
(2) More than \$500 below State median..... 8

(b) *Median income of service area.* The median annual family of the service area compared to the State annual median family income is: (Select one if appropriate):

(1) \$1-\$500 below State median..... 4
(2) More than \$500 below State median..... 8

Median family incomes for the service area and the State are to be obtained by utilizing the City County Data Book or other census data if possible. Or use best available data.

§ 551.20 Commitment of local, State, and Federal entities to project or program.

(The value of this category is the sum of paragraphs (a) to (d) of this section.)

(a) *Local commitment.* There was substantial participation by the chief executive and local governing body during the planning of the project, and they are demonstrating current public commitment in support of the project..... 4

(b) *Resident commitment.* There was effective widespread participation of a representative spectrum of residents in the development of project objectives and there is evidence of current support for the execution of the project..... 4

(c) *Coordination of resources.* There was substantial participation of other local agencies during planning, and there is a current commitment including resources, from State, county, or local entities other than those necessary to satisfy the local share requirement..... 4

(d) *Participation in areawide or metropolitan planning.* There is active participation by the locality's representatives in the areawide or metropolitan planning organization..... 3

§ 551.22 Expansion of housing for low- and moderate-income families.

(The value of this category is the sum of paragraphs (a) and (b) of this section.)

(a) *Expansion of low- and moderate-income housing.* Within the applicant's geographic area of jurisdiction, there has been significant expansion of the supply of standard housing for low- and moderate-income families in a nondiscriminatory way..... 6

(b) *Dispersion of low- and moderate-income housing.* The locality has a realistic plan to expand the supply of standard low- and moderate-income housing in a nondiscriminatory way outside areas of concentration of economically disadvantaged or minority citizens..... 4

§ 551.24 Community development.

The degree to which the project is necessary for undertaking other publicly supported community development activities..... 0 to 4

"Community development activities" refers to those publicly supported physical development activities and those related

social or economic development activities being carried out or to be carried out within a reasonable period of time in accordance with a locally determined or areawide plan or strategy. Factors taken into consideration may include the project's responsiveness to local needs and objectives, the economics possible through coordinated or joint action, the degree of support by the appropriate unit(s) of local general-purpose government, and the management capacity and efforts to develop management capacity within local general-purpose government.

PART 561—PUBLIC FACILITY LOANS PROGRAM

Sec.	
561.1	Scope.
561.2	Definitions.
561.4	Program prerequisites.
561.6	Criteria for evaluating applications.
561.8	Availability of credit to applicant.
561.10	Type of project.
561.12	Population class.
561.14	Physical need.
561.16	Housing consideration.
561.18	Local equal employment and entrepreneurial effort.
561.20	Local need.
561.22	Commitment of local, State, and Federal entities to project or program.
561.24	Expansion of housing for low- and moderate-income families.
561.26	Community development.

AUTHORITY: The provisions of this Part 561 issued under secs. 201-204, of the Housing Amendments of 1955, 69 Stat. 642-644; 42 U.S.C. 1491-1494.

§ 561.1 Scope.

(a) *Purpose.* This part sets forth criteria and procedures to be used in preliminary evaluation of applications for Federal loan assistance to local public bodies and agencies under the Public Facility Loans Program.

(b) *Procedures.* Submissions will first be reviewed against four prerequisites. If any of these prerequisites are not met, the application will be rejected. If the application meets all prerequisites, it will be evaluated against the point rated criteria and assigned a point rating. The application will then be rejected or processed further according to its point rating as compared with the point ratings of other competing applications. This evaluation will not result in a final decision to extend loan assistance to particular Public Facility Loan projects. Such decision will be made only after a full technical review of applications for compliance with all relevant statutory requirements.

§ 561.2 Definitions.

As used in the regulations in this part:

(a) "Locality" means the political jurisdiction or jurisdictions having general purpose government powers upon whose behalf the application for funding has been submitted.

(b) "Low and moderate income" means an income level which is less than the maximum income eligibility level for a family of four for the county in which the project is to be located under either of the subsidized housing programs authorized by section 235 or 236 of the

National Housing Act, as amended 82 Stat. 476, 477, 498, 12 U.S.C. 1715z, 1715 z-1.

(c) "Low- and moderate-income housing" refers to housing with a fair market value that is equal to or less than the resultant of multiplying the section 235-236 maximum income for a family of four, as established by the Secretary for the county in which the project is located, by a factor of 3. "Low- and moderate-income housing" also refers to housing with an annual rental equal to or less than one-third of such section 235-236 maximum income.

§ 561.4 Program prerequisites.

For the Public Facility Loans Program there are the following four prerequisites:

(a) *Population.* The population of the locality submitting the application is less than 50 thousand or in a designated redevelopment area, less than 150 thousand. This prerequisite does not apply to NASA impacted areas, Public Law 345, 84th Congress, 69 Stat. 635, 642; 42 U.S.C. 1491.

(b) *Civil rights.* Submission of acceptable assurances of compliance with title VI of the Civil Rights Act of 1964, Public Law 88-352, 78 Stat. 252, 42 U.S.C. 2000d and HUD Title VI regulations 24 CFR Part I, 29 F.R. 16280 and with affirmative action plan requirements pursuant to Executive Order 11246, as amended 30 F.R. 12319, and HUD regulations 24 CFR Part 8, 36 F.R. 20688.

(c) *Relocation.* Absence of any known impediment to the locality's ability to meet relocation requirements.

"Known impediment" refers to both a legal inability to comply with Title I, Housing Act of 1949, as amended, Public Law 81-171; 63 Stat. 413, 414, 420 U.S.C. 1450, or the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, Public Law 91-646, 84 Stat. 1894, 42 U.S.C. 4601, or other statutory requirements and a practical inability to provide adequate relocation assistance.

(d) *A-95 coordination.* Evidence that A-95 coordination is in process. The phrase "A-95 coordination" refers to the procedure involving review of applications by the appropriate agency under OMB Circular A-95.

§ 561.6 Criteria for evaluating applications.

Criteria for evaluating applications are divided into the following major categories:

- (a) Availability of credit to applicant;
- (b) Type of projects;
- (c) Population class;
- (d) Physical need;
- (e) Housing consideration;
- (f) Local equal employment effort;
- (g) Local need;
- (h) Commitment of local, State, and Federal entities to project or program;
- (i) Expansion of housing for low- and moderate-income families;
- (j) Community development.

The elements considered in each category are described in the following sections,

and the method of assigning rating points to each element or category is set forth. Points are awarded to each element or category in the following manner unless otherwise specifically indicated: If a statement under a particular element or category applies specifically to the project application under consideration, the application is awarded the number of points assigned to that statement. If no statement applies, no points are awarded to the application for that element.

§ 561.8 Availability of credit to applicant.

(The value of this category is the values of paragraph (a) or paragraph (b) of this section.)

- (a) Credit is not available in the private market..... 12
- (b) Private credit is available at a rate 1 percent above the Public Facility Loan rate or more..... 6

§ 561.10 Type of project.

(The value of this category is the value of paragraph (a), (b), (c) or (d) of this section.)

- (a) The project is a water sewer facility..... 10
- (b) The project is a gas facility..... 8
- (c) The project is a health facility..... 8
- (d) The project is a public building..... 5

§ 561.12 Population class.

(The value of this category is the value of paragraph (a) or paragraph (b) of this section.)

- (a) The population of the locality is under 10,000..... 10
- (b) The population of the locality is 10,000 to 25,000..... 5

§ 561.14 Physical need.

(The value of this category is the value of paragraph (a) or paragraph (b) of this section.)

- (a) The project will meet a critical need..... 12
- (b) The project will provide a basic needed facility which is not currently available..... 6

"Critical need" refers to a demonstrated need which must be met immediately to prevent or terminate a serious threat to the health or safety of the locality, e.g., a desperate need for water or control of demonstrated causes of diseases of epidemic proportions.

§ 561.16 Housing consideration.

(The value of this category is the sum of paragraphs (a) through (c) of this section.)

- (a) The project is necessary for maintenance of existing decent, safe, and sanitary housing..... 3
- (b) The project is necessary for assistance to proposed decent, safe, and sanitary low- and moderate-income housing..... 5
- (c) The project is necessary for assistance for significant areas of housing that is less than decent, safe, and sanitary..... 3

"Decent, safe and sanitary" refers to housing that is in accordance with the

local housing standards in the area in which the project is to be located.

§ 561.18 Local equal employment and entrepreneurial effort.

(The value of this category is the sum of the values of either paragraph (a) or paragraph (b) of this section.)

(a) *If locality has previously received financial funding under the Public Facilities Loans Program.* (Value of this element is the sum of the values of subparagraphs (1) to (3) of this paragraph.)

- (1) Activities undertaken by the locality have provided relatively superior opportunities for training and/or employment, of minority persons..... 3
- (2) Activities undertaken by the locality have provided relatively superior opportunities for business concerns owned, controlled, or managed in substantial part by minority persons..... 3
- (3) The applicant has taken affirmative action in its own employment in the hiring, training, etc., of minority persons, with relatively superior results..... 4

(b) *If locality has not previously received financial funding under the Public Facility Loans Programs.* (Value of this element is the sum of the values of subparagraphs (1) and (2) of this paragraph.)

- (1) Activities undertaken by the locality have provided relatively superior opportunities for training and/or employment of minority persons..... 5
- (2) Activities undertaken by the locality have provided relatively superior opportunities for business concerns owned, controlled, or managed in substantial part by minority persons.

In determining whether or not performance has been "relatively superior", the following items will be taken into consideration. Absolute numbers of persons actually trained or hired in relation to numbers of minority group persons in the labor market area; total dollar value of contracts let to minority entrepreneurs in relation to total dollar amount of contracts let by locality; within the administering agency, racial composition at all levels of employment and absolute number of training opportunities made available to minority group persons.... 5

§ 561.20 Local need.

(The value of this category is the sum of the values of paragraphs (a) and (b) of this section.)

(a) *Median income of jurisdiction.* The median annual family income of the geographic area of jurisdiction of the applicant compared to the State median annual family income is: (Select one, if appropriate):

- (1) \$1-\$500 below State median.... 4
- (2) More than \$500 below State median..... 8

(b) *Median income of service area.* The median annual family income of the service area compared to the State annual median family income is: (Select one, if appropriate):

- (1) \$1-\$500 below State median.... 4
- (2) More than \$500 below State median..... 8

Median family incomes for the service area and the state are to be obtained by utilizing the City County Data Book or other census data if possible. Or use best available data.

§ 561.22 Commitment of local, State, and Federal entities to project or program.

(The value of this category is the sum of paragraphs (a) to (d) of this section.)

(a) *Local commitment.* There was substantial participation by the chief executive and local governing body during the planning of the project, and they are demonstrating current public commitment in support of the project. 4

(b) *Resident commitment.* There was effective widespread participation of a representative spectrum of residents in the development of project objectives and there is evidence of current support for the execution of the project. 4

(c) *Coordination of resources.* There was substantial participation of other local agencies during planning, and there is a current commitment including resources, from State, county, or local entities other than those necessary to satisfy the local share requirement. 4

(d) *Participation in areawide or metropolitan planning.* There is active participation by the locality's representatives in the areawide or metropolitan planning organization. 3

§ 561.24 Expansion of housing for low- and moderate-income families.

(The value of this category is the sum of paragraphs (a) and (b) of this section.)

(a) *Expansion of low- and moderate-income housing.* Within the applicant's geographic area of jurisdiction, there has been significant expansion of the supply of standard housing for low- and moderate-income families in a nondiscriminatory way. 6

(b) *Dispersion of low- and moderate-income housing.* The locality has a realistic plan to expand the supply of standard low- and moderate-income housing in a nondiscriminatory way outside areas of concentration of economically disadvantaged or minority citizens. 4

§ 561.26 Community development.

The degree to which the project is necessary for undertaking other publicly supported community development activities. 0 to 4

"Community development activities" refers to those publicly supported physical development activities and those related social or economic development activities being carried out or to be carried out within a reasonable period of time in accordance with a locally determined or areawide plan or strategy. Factors taken into consideration may include the project's responsiveness to local needs and objectives, the economies possible through coordinated or joint action, the degree of support by the appropriate unit(s) of local general-purpose government, and the management capacity and efforts to develop management

capacity within local general-purpose government.

FLOYD H. HYDE,
Assistant Secretary for
Community Development.

[FR Doc.71-17298 Filed 11-24-71;8:56 am]

DEPARTMENT OF TRANSPORTATION

Coast Guard

[33 CFR Part 26]

[CGFR 71-150]

VESSEL BRIDGE-TO-BRIDGE RADIOTELEPHONE

Extension of Comment Period

The Coast Guard proposed regulations to implement the Vessel Bridge-to-Bridge Radiotelephone Act in a notice of proposed rule making (CGFR 71-114) which was published in the FEDERAL REGISTER on October 20, 1971 (36 F.R. 20306).

The American Waterways Operators, Inc., has requested additional time to submit comments to permit their committee, which deals with communications matters, to review and comment on the proposal. Since this committee will be unable to meet until November 30 and since the members of the American Waterways Operators will be directly affected by the proposal, the Coast Guard finds that good cause exists for the extension and that the extension is in the public interest.

Therefore, the Coast Guard will consider all comments on this notice of proposed rule making (CGFR 71-114) received on or before December 10, 1971.

Dated: November 19, 1971.

C. R. BENDER,
Admiral, U.S. Coast Guard
Commandant.

[FR Doc.71-17249 Filed 11-24-71;8:51 am]

[33 CFR Part 110]

[CGFR 71-153]

WILMINGTON RIVER, GA.

Proposed Anchorage Grounds

The Coast Guard is considering revoking the regulations which established an anchorage ground on the Wilmington River at Thunderbolt, Ga., as described in 33 CFR 110.178. The anchorage ground is not considered suitable for anchoring vessels because of the construction of a bridge through the anchorage ground and existing shoal conditions.

Interested persons may participate in this proposed rule making by submitting written data, views, or arguments to the Commander, Seventh Coast Guard District, Room 1018, Federal Building, 51 Southwest First Avenue, Miami, FL

33130. Each person submitting comments should include his name and address, identify this notice (CGFR 71-153), and give reasons for any recommended change in the proposal. Copies of all written communications received will be available for examination by interested persons at the office of the Commander, Seventh Coast Guard District.

The Commander, Seventh Coast Guard District, will forward any comments received before December 27, 1971, and his recommendations to the Chief, Office of Marine Environment and Systems, U.S. Coast Guard Headquarters, who will evaluate all communications received and take final action on this proposal. The proposal may be changed in light of comments received.

(Sec. 7, 38 Stat. 1053, as amended, sec. 6 (g) (1) (A), 80 Stat. 937; 33 U.S.C. 471, 49 U.S.C. 1655(g) (1) (A); 49 CFR 1.46(c) (1), 33 CFR 1.05-1(c) (1) (36 F.R. 19160))

Dated: November 19, 1971.

W. M. BENKERT,
Rear Admiral, U.S. Coast Guard,
Chief, Office of Marine Environment
and Systems.

[FR Doc.71-17271 Filed 11-24-71;8:53 am]

Federal Aviation Administration

[14 CFR Part 39]

[Docket No. 71-EA-126]

CANADAIR AIRCRAFT

Proposed Airworthiness Directive

The Federal Aviation Administration is considering amending § 39.13 of the Federal Aviation regulations so as to issue an Airworthiness Directive applicable to Canadair CL-215-1A10 type aircraft.

A review of the certification data by Department of Transportation, Canada, reflects a need to assure that the subject aircraft meet the certification requirements of FAR 25.1183 (a) (1) and (a) (2) as they relate to fire resistant lines in the engine fire zone. To meet this need an Airworthiness Directive will be issued requiring the alteration of certain hydraulic and engine lubrication hose assemblies.

Interested persons are invited to participate in the making of the proposed rule by submitting written data and views. Communications should identify the docket number and be submitted in duplicate to the Office of Regional Counsel, FAA, Federal Building, John F. Kennedy International Airport, Jamaica, N.Y. 11430.

All communications received within 30 days after publication in the FEDERAL REGISTER will be considered before taking action upon the proposed rule. The proposals contained in this notice may be changed in light of comments received. All comments will be available in the Office of Regional Counsel for examination by interested parties.

In consideration of the foregoing, it is proposed to issue a new airworthiness directive as hereinafter set forth:

CANADAIR: Applies to Canadair Limited Type CL-215-1A10 airplanes, Serial Nos. 1005, 1006, 1010, 1011, 1013 through 1018, 1021, and 1023 through 1030.

Compliance required within the next 125 hours' time in service, unless already accomplished, after the effective date of this AD. To reduce the risk of flame propagation in the event of a fire in the engine fire zone, modify the oil system and hydraulic system hoses in accordance with the instructions and effectivities listed in the following Canadair Service Bulletins or an equivalent modification approved by the Chief, Engineering and Manufacturing Branch, FAA, Eastern Region.

(a) Canadair Service Bulletin CL-215-138 dated February 2, 1971, and revision "A" dated April 23, 1971 or later approved revision.

(b) Canadair Service Bulletin CL-215-140 dated January 18, 1971 or later approved revision.

Upon request with substantiating data submitted through an FAA maintenance inspector, the compliance time specified in this AD may be increased by the Chief, Engineering and Manufacturing Branch, FAA, Eastern Region.

This proposal is made under the authority of sections 313(a), 601 and 603 of the Federal Aviation Act of 1958 (49 U.S.C. 1354(a), 1421 and 1423), and section 6(c) of the Department of Transportation Act (49 U.S.C. 1655(c)).

Issued in Jamaica, N.Y., on November 16, 1971.

ROBERT H. STANTON,
Acting Director, Eastern Region.

[FR Doc.71-17182 Filed 11-24-71;8:46 am]

[14 CFR Part 71]

[Airspace Docket No. 71-GL-16]

TRANSITION AREA

Proposed Designation

The Federal Aviation Administration is considering amending Part 71 of the Federal Aviation regulations so as to designate a transition area at Ashland, Ohio.

Interested persons may participate in the proposed rule making by submitting such written data, views or arguments as they may desire. Communications should be submitted in triplicate to the Director, Great Lakes Region, Attention: Chief, Air Traffic Division, Federal Aviation Administration, 3166 Des Plaines Avenue, Des Plaines, IL 60018. All communications received within 45 days after publication of this notice in the FEDERAL REGISTER will be considered before action is taken on the proposed amendment. No public hearing is contemplated at this time, but arrangements for informal conferences with Federal Aviation Administration officials may be made by contacting the Regional Air Traffic Division Chief.

Any data, views, or arguments presented during such conferences must also be submitted in writing in accordance with this notice in order to become part of the record for consideration. The proposal contained in this notice may be changed in the light of comments received.

A public docket will be available for examination by interested persons in the Office of the Regional Counsel, Federal Aviation Administration, 3166 Des Plaines Avenue, Des Plaines, IL 60018.

A new public use instrument approach procedure has been developed for the Ashland, Ohio, County Airport based on a non-Federal-owned NDB. Consequently, it is necessary to provide controlled airspace protection for aircraft executing this new approach procedure by designating a transition area at Ashland, Ohio.

In consideration of the foregoing, the Federal Aviation Administration proposes to amend Part 71 of the Federal Aviation regulations as hereinafter set forth:

In § 71.181 (36 F.R. 2140), the following transition area is added:

ASHLAND, OHIO

That airspace extending upward from 700 feet above the surface within a 5½ mile radius of the Ashland County Airport (latitude 40°54'11" N., longitude 82°15'21" W.); within 3½ miles each side of the 002° bearing from the airport extending from the 5½ mile radius area to 11½ miles north of the airport excluding that portion which overlies the Mansfield, Ohio, transition area.

This amendment is proposed under the authority of section 307(a) of the Federal Aviation Act of 1958 (49 U.S.C. 1348), and of section 6(c) of the Department of Transportation Act (49 U.S.C. 1655(c)).

Issued in Des Plaines, Ill., on October 28, 1971.

R. O. ZIEGLER,
Acting Director,
Great Lakes Region.

[FR Doc.71-17168 Filed 11-24-71;8:45 am]

[14 CFR Part 71]

[Airspace Docket No. 71-SW-65]

TRANSITION AREA

Proposed Designation

The Federal Aviation Administration is considering amending Part 71 of the Federal Aviation regulations to designate a 700-foot transition area at Commerce, Tex.

Interested persons may submit such written data, views, or arguments as they may desire. Communications should be submitted in triplicate to the Chief, Air Traffic Division, Southwest Region, Federal Aviation Administration, Post Office Box 1689, Fort Worth, TX 76101. All communications received within 30 days after publication of this notice in the FEDERAL REGISTER will be considered before action is taken on the proposed amendment. No public hearing is contemplated at this time, but arrangements for informal conferences with Federal Aviation Administration officials may be made by contacting the Chief, Air Traffic Division. Any data, views, or arguments presented during such conferences must also be submitted in writing in accordance with this notice in order to become part of the record for consideration. The

proposal contained in this notice may be changed in the light of comments received.

The official docket will be available for examination by interested persons at the Office of the Regional Counsel, Southwest Region, Federal Aviation Administration, Forth Worth, Tex. An informal docket will also be available for examination at the Office of the Chief, Air Traffic Division.

It is proposed to amend Part 71 of the Federal Aviation regulations as herein-after set forth.

In § 71.181 (36 F.R. 2140), the following transition area is added.

COMMERCE, TEX.

That airspace extending upward from 700 feet above the surface within a 5-mile radius of Commerce Municipal Airport (latitude 33°17'36" N., longitude 95°53'46" W.) and within 2.5 miles each side of the Sulphur Springs, Tex., VORTAC 286° radial extending from the 5-mile radius area to 15 miles west of the VORTAC.

The proposed transition area will provide controlled airspace for aircraft executing approach/departure procedures proposed at Commerce Municipal Airport.

This amendment is proposed under the authority of section 307(a) of the Federal Aviation Act of 1958 (49 U.S.C. 1348) and of section 6(c) of the Department of Transportation Act (49 U.S.C. 1655(c)).

Issued in Fort Worth, Tex., on November 16, 1971.

R. V. REYNOLDS,
Acting Director, Southwest Region.

[FR Doc.71-17172 Filed 11-24-71;8:45 am]

[14 CFR Part 71]

[Airspace Docket No. 71-GL-19]

CONTROL ZONE

Proposed Alteration

The Federal Aviation Administration is considering amending Part 71 of the Federal Aviation regulations so as to alter the control zone at Dayton, Ohio.

Interested persons may participate in the proposed rule making by submitting such written data, views, or arguments as they may desire. Communications should be submitted in triplicate to the Director, Great Lakes Region, Attention: Chief, Air Traffic Division, Federal Aviation Administration, 3166 Des Plaines Avenue, Des Plaines, IL 60018. All communications received within 45 days after publication of this notice in the FEDERAL REGISTER will be considered before action is taken on the proposed amendments. No public hearing is contemplated at this time, but arrangements for informal conferences with Federal Aviation Administration officials may be made by contacting the Regional Air Traffic Division Chief.

Any data, views, or arguments presented during such conferences must also be submitted in writing in accordance with this notice in order to become part

of the record for consideration. The proposal contained in this notice may be changed in the light of comments received.

A public docket will be available for examination by interested persons in the Office of the Regional Counsel, Federal Aviation Administration, 3166 Des Plaines Avenue, Des Plaines, IL 60018.

Since designation of controlled airspace at Springfield, Ohio, two new instrument approach procedures have been developed for the Springfield Municipal Airport, Springfield, Ohio, utilizing the Patterson VOR and the Patterson TACAN as navigational aids. Accordingly, it is necessary to alter the Dayton, Ohio control zone to adequately protect aircraft executing the new procedures.

In consideration of the foregoing, the Federal Aviation Administration proposes to amend Part 71 of the Federal Aviation regulations as hereinafter set forth:

In § 71.171 (36 F.R. 2055), the following control zone is amended to read:

DAYTON, OHIO (WRIGHT-PATTERSON AFB)

Within a 5-mile radius of Patterson AFB, Dayton, Ohio (latitude 39°49'25" N., longitude 84°02'55" W.); within 2 miles each side of the Patterson VOR 039° radial extending from the 5-mile radius zone to 10 miles northeast of the VOR; within 2 miles each side of the Patterson TACAN 064° radial extending from the 5-mile radius zone to 8 miles northeast of the TACAN; within a 5-mile radius of Wright AFB, Dayton, Ohio (latitude 39°46'45" N., longitude 84°06'35" W.); within a 6-mile radius of the Springfield Municipal Airport, Springfield, Ohio (latitude 39°50'22" N., longitude 83°50'21" W.); within 3 miles each side of the 055° bearing from the airport extending from the 6-mile radius zone to 9 miles northeast of the airport and within 3 miles south and 4 miles north of the 243° bearing from the airport extending from the 6-mile radius zone to 8.5 miles southwest of the airport.

These amendments are proposed under the authority of section 307(a) of the Federal Aviation Act of 1958 (49 U.S.C. 1348), and of section 6(c) of the Department of Transportation Act (49 U.S.C. 1655(c)).

Issued in Des Plaines, Ill., on November 4, 1971.

R. O. ZIEGLER,
Acting Director,
Great Lakes Region.

[FR Doc. 71-17171 Filed 11-24-71; 8:45 am]

[14 CFR Part 71]

[Airspace Docket No. 71-GL-17]

TRANSITION AREA

Proposed Alteration

The Federal Aviation Administration is considering amending Part 71 of the Federal Aviation regulations so as to alter the transition area at Richmond, Ind.

Interested persons may participate in the proposed rule making by submitting such written data, views or arguments as

they may desire. Communications should be submitted in triplicate to the Director, Great Lakes Region, Attention: Chief, Air Traffic Division, Federal Aviation Administration, 3166 Des Plaines Avenue, Des Plaines, IL 60018. All communications received within 45 days after publication of this notice in the FEDERAL REGISTER will be considered before action is taken on the proposed amendment. No public hearing is contemplated at this time, but arrangements for informal conferences with Federal Aviation Administration officials may be made by contacting the Regional Air Traffic Division Chief.

Any data, views or arguments presented during such conferences must also be submitted in writing in accordance with this notice in order to become part of the record for consideration. The proposal contained in this notice may be changed in the light of comments received.

A public docket will be available for examination by interested persons in the Office of the Regional Counsel, Federal Aviation Administration, 3166 Des Plaines Avenue, Des Plaines, IL 60018.

The Richmond, Ind., Municipal Airport VOR approaches have been revised and the NDB decommissioned and the NDB approach canceled. These changes require changes in the controlled airspace to adequately protect the aircraft executing the revised procedures.

In consideration of the foregoing, the Federal Aviation Administration proposes to amend Part 71 of the Federal Aviation regulations as hereinafter set forth:

In § 71.181 (36 F.R. 2140), the following transition area is amended to read:

RICHMOND, IND.

That airspace extending upward from 700 feet above the surface within 6½ mile radius of the Richmond Municipal Airport (latitude 39°45'23" N., longitude 84°50'36" W.); within 3 miles each side of the Richmond VOR 045° radial, extending from the 6½ mile radius area to 8 miles northeast of the VOR; within 3 miles each side of the Richmond VOR 243° radial, extending from the 6½ mile radius area to 8 miles southwest of the VOR; and that airspace extending upward from 1,200 feet above the surface bounded on the northeast by a line extending from latitude 40°10'00" N., longitude 85°00'00" W. to latitude 39°40'00" N., longitude 84°25'00" W. on the southeast by a line extending from latitude 39°40'00" N., longitude 84°25'00" W. to latitude 39°12'00" N., longitude 85°30'00" W. and on the west by the Indiana-Ohio boundary.

This amendment is proposed under the authority of section 307(a) of the Federal Aviation Act of 1958 (49 U.S.C. 1348), and of section 6(c) of the Department of Transportation Act (49 U.S.C. 1655(c)).

Issued in Des Plaines, Ill., on October 28, 1971.

R. O. ZIEGLER,
Acting Director,
Great Lakes Region.

[FR Doc. 71-17169 Filed 11-24-71; 8:45 am]

[14 CFR Part 71]

[Airspace Docket No. 71-GL-18]

TRANSITION AREA

Proposed Designation

The Federal Aviation Administration is considering amending Part 71 of the Federal Aviation regulations so as to designate a transition area at Tell City, Ind.

Interested persons may participate in the proposed rule making by submitting such written data, views, or arguments as they may desire. Communications should be submitted in triplicate to the Director, Great Lakes Region, Attention: Chief, Air Traffic Division, Federal Aviation Administration, 3166 Des Plaines Avenue, Des Plaines, IL 60018. All communications received within 45 days after publication of this notice in the FEDERAL REGISTER will be considered before action is taken on the proposed amendment. No public hearing is contemplated at this time, but arrangements for informal conferences with Federal Aviation Administration officials may be made by contacting the Regional Air Traffic Division Chief.

Any data, views or arguments presented during such conferences must also be submitted in writing in accordance with this notice in order to become part of the record for consideration. The proposal contained in this notice may be changed in the light of comments received.

A public docket will be available for examination by interested persons in the Office of the Regional Counsel, Federal Aviation Administration, 3166 Des Plaines Avenue, Des Plaines, IL 60018.

A new public use instrument approach procedure has been developed for the Perry County Airport, Tell City, Ind., utilizing a nonfederally owned NDB. Consequently, it is necessary to provide controlled airspace protection for aircraft executing this new approach procedure by designating a transition area at Tell City, Ind. The new procedure will become effective concurrently with the designation of the transition area.

In consideration of the foregoing, the Federal Aviation Administration proposes to amend Part 71 of the Federal Aviation regulations as hereinafter set forth:

In § 71.181 (36 F.R. 2140), the following transition area is added:

TELL CITY, IND.

That airspace extending upward from 700 feet above the surface within a 5-mile radius of the Perry County Municipal Airport, Ind. (latitude 38°01'05" N., longitude 86°41'30" W.); and within 3 miles each side of the 105° bearing from the Perry County Municipal Airport extending from the 5-mile radius to 8 miles southeast.

This amendment is proposed under the authority of section 307(a) of the Federal Aviation Act of 1958 (49 U.S.C. 1348), and of section 6(c) of the Department of Transportation Act (49 U.S.C. 1655(c)).

Issued in Des Plaines, Ill., on November 3, 1971.

LYLE K. BROWN,
Director, Great Lakes Region.

[FR Doc. 71-17170 Filed 11-24-71; 8:45 am]

ATOMIC ENERGY COMMISSION

[10 CFR Part 100]

NUCLEAR POWER PLANTS

Seismic and Geologic Siting Criteria

The Atomic Energy Commission has under consideration amendments to its regulations, 10 CFR Part 100, "Reactor Site Criteria," which would add an Appendix A, "Seismic and Geologic Siting Criteria for Nuclear Power Plants." The purpose of the criteria is to set forth the principal seismic and geologic considerations which guide the Commission in its evaluation of the suitability of proposed sites for nuclear powerplants and the suitability of the plant design bases established in consideration of the seismic and geologic characteristics of the proposed sites in order to provide reasonable assurance that the nuclear powerplant can be constructed and operated at a proposed site without undue risk to the health and safety of the public.

The criteria describe the seismic and geologic investigations required to obtain information needed to determine the design basis for earthquake-produced vibratory ground motion and for seismically-induced floods and water waves. They also describe investigations required to obtain information to determine whether and to what extent the nuclear powerplant need be designed for surface faulting.

The design basis for the maximum vibratory ground motion is determined, as described in the criteria, through evaluation of the geology and the geologic and seismic history of the site and the surrounding region. The most severe earthquakes associated with tectonic structures or tectonic provinces in the region surrounding the site are identified by considering those historically reported earthquakes that can be associated with these structures or provinces. If faults in the region surrounding the site are active faults, the most severe expected earthquakes associated with these faults are determined by also considering their geologic history. Because of the limited historical data, the most severe earthquakes associated with these tectonic structures or tectonic provinces are determined in a conservative manner and are usually larger than the maximum earthquakes historically recorded. The design basis for vibratory ground motion at the site is then determined by assuming that the epicenters or regions of highest intensity of the earthquakes are situated at the point on the tectonic structures or tectonic provinces nearest the site.

The criteria require the evaluation of other design considerations which are affected by the design basis for vibratory ground motion, including soil stability, slope stability, and cooling water supply.

In order to determine whether and to what extent a nuclear power plant need be designed to withstand the effects of surface faulting, the criteria require that the location of the site with respect to active faults be considered. Procedures are provided for determining whether the site is within a zone requiring detailed faulting investigation based on its location with respect to active faults. Where a site is within a zone requiring detailed faulting investigation, the criteria require that the regional and local geologic and seismic characteristics of the site be investigated in considerable detail. The adequacy of the detailed investigation will be determined by the Commission on an individual case basis, taking into account the specific site characteristics. Where the detailed investigation indicates that surface faulting need not be taken into account in the design of the nuclear power plant, the criteria require that sufficient data to clearly justify the proposed design basis be presented in the license application.

The criteria also provide general guidance for the design of a nuclear power plant to withstand earthquake-caused effects, pending the development of more detailed criteria.

The criteria were prepared in cooperation with the U.S. Geological Survey and the National Oceanic and Atmospheric Administration. The development of these criteria has taken into account the experience accumulated by these agencies and the Atomic Energy Commission in evaluating seismic and geologic characteristics of sites which have been proposed to date for the location of nuclear power plants. The development of these criteria has also taken into account discussions with and comments by a representative group of utilities and their specialist consultants in order to assure clarity of the criteria and their applicability to sites being considered by the nuclear industry.

These seismic and geologic siting criteria would supplement 10 CFR Part 100 by specifying the seismic and geologic investigations and analyses necessary in determining the acceptability of a proposed site, as required by § 100.10 of 10 CFR Part 100. Specific references to the proposed Appendix A, "Seismic and Geologic Siting Criteria for Nuclear Power Plants," would be added to § 100.10(c)(1). The provisions in § 100.10(c)(1) which state that the design of a facility should conform to accepted building codes or standards and that no facility should be located closer than one-fourth mile from the surface location of a known active earthquake fault would be deleted since these provisions are superseded by these criteria.

The criteria would also assist applicants in complying with § 50.34(a)(1) of 10 CFR Part 50 which requires that the preliminary safety analysis report include a description and safety assessment of the site on which a production or utilization facility is to be located, with appropriate attention to features affecting facility design.

The Commission expects that the provisions of the proposed amendments will be useful as interim guidance until such time as the Commission takes further action on them.

Pursuant to the Atomic Energy Act of 1954, as amended, and section 553 of title 5 of the United States Code, notice is hereby given that adoption of the following amendments to 10 CFR Part 100 is contemplated. All interested persons who wish to submit comments or suggestions in connection with the proposed amendments should send them to the Secretary, U.S. Atomic Energy Commission, Washington, D.C. 20545, Attention: Chief, Public Proceedings Branch, within 60 days after publication of this notice in the FEDERAL REGISTER. Copies of comments received may be examined in the Commission's Public Document Room at 1717 H Street NW., Washington, DC.

1. In § 100.10, paragraph (c)(1) is amended to read as follows:

§ 100.10 Factors to be considered when evaluating sites.

(c) Physical characteristics of the site, including seismology, meteorology, geology, and hydrology.

(1) Appendix A, "Seismic and Geologic Siting Criteria for Nuclear Power Plants," sets forth the principal seismic and geologic considerations which guide the Commission in its evaluation of the suitability of proposed sites for nuclear power plants.

2. A new Appendix A is added to read as follows:

APPENDIX A

SEISMIC AND GEOLOGIC SITING CRITERIA FOR NUCLEAR POWER PLANTS

I. Purpose. It is the purpose of these criteria to set forth the principal seismic and geologic considerations which guide the Commission in its evaluation of the suitability of proposed sites for nuclear power plants, and the suitability of the plant design bases established in consideration of the seismic and geologic characteristics of the proposed sites.

These criteria are based on the limited geophysical and geological information available to date concerning earthquake occurrence and effect. They will be revised as necessary when more complete information becomes available.

II. Scope. These criteria, which apply to nuclear powerplants, describe the nature of the investigations required to obtain the geologic and seismic data necessary to determine site suitability and provide reasonable assurance that a nuclear powerplant can be constructed and operated at a proposed site without undue risk to the health and safety of the public. They describe procedures for determining the quantitative vibratory ground motion design basis at a site due to earthquakes and describe information needed to determine whether and to what extent a nuclear powerplant need be designed for surface faulting. Other geologic and seismic factors required to be taken into account in the siting and design of nuclear powerplants are identified.

Each applicant for a construction permit shall investigate all seismic and geologic factors that may affect the design and operation of the proposed nuclear powerplant irrespective of whether such factors are explicitly

included in these criteria. Additional investigations and more conservative determinations than those included in these criteria may be required for sites located in unusual geologic or seismic areas. If an applicant believes that the seismology and geology of a site indicate that some of these criteria, or portions thereof, need not be satisfied, the specific sections of these criteria should be identified in the license application, and supporting data to justify clearly such departures should be presented.

III. Definitions. As used in these criteria:

(a) The "magnitude" of an earthquake is a measure of its effects on man, on man-built structures, and on the earth's surface at a particular location. "Intensity" means the numerical value on a Richter scale.

(b) The "intensity" of an earthquake is a measure of its effects on man, on man-built structures, and on the earth's surface at a particular location. "Intensity" means the numerical value on the Modified Mercalli scale.

(c) The "Safe Shutdown Earthquake" is that earthquake which produces the vibratory ground motion for which structures, systems, and components important to safety are designed to remain functional.

These structures, systems, and components are those necessary to assure:

(1) The integrity of the reactor coolant pressure boundary.

(2) The capability to shut down the reactor and maintain it in a safe shutdown condition, or

(3) The capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures comparable to the guideline exposure of 10 CFR Part 100.

(d) The "Operating Basis Earthquake" is that earthquake which produces the vibratory ground motion for which those structures, systems, and components necessary for power generation are designed to remain operable.

(e) A "fault" is a tectonic structure along which differential displacement of the adjacent earth materials has occurred parallel to the fracture plane. It is distinct from nontectonic types of ground disruption such as landsliding, fissuring, and cratering. A fault may have gouge or breccia between its two walls and includes any associated monoclinical flexure (a step-like bend in otherwise horizontal or gently dipping beds which passes into a fault) or other similar geologic structural feature.

(f) "Surface Faulting" is differential ground displacement at or near the surface caused directly by fault movement and is distinct from nontectonic types of ground disruption, such as landsliding, fissuring and cratering.

(g) An "active fault"¹ is a fault which has exhibited one or more of the following characteristics:

(1) Movement at or near the ground surface at least once in the past 35,000 years or more than once in the past 500,000 years. In the absence of data permitting absolute dating, faults with sufficiently recent movement to leave perceptible evidence of surface rup-

ture, surface warping, or offset of geomorphic features are considered active faults.

(2) Instrumentally well-determined macro-seismicity for a fault located in the continental United States west of the Rocky Mountain Front, or in Alaska, Hawaii, or Puerto Rico.

(3) A relationship to an active fault according to characteristics (1) or (2) such that movement on one could be reasonably expected to be accompanied by movement on the other.

In some cases, the geologic evidence of past activity at or near the ground surface along a particular fault may be obscured at a particular site. This might occur, for example, at a site having a deep alluvial overburden. For these cases, evidence may exist elsewhere along the fault from which an evaluation of its characteristics in the vicinity of the site can be reasonably based. Such evidence shall be used in determining whether the fault is an active fault within this definition.

Other valid geologic reasons may exist to demonstrate that a fault which has one of the characteristics stated in (1) through (3) is not an active fault within this definition. For example, some faults may lack deep-seated, long-term causes and be due to shallow short-term causes. Association of a fault with geologic structural features which are geologically old (at least pre-Quaternary) may, in the absence of conflicting evidence, demonstrate that the fault is not an active fault within this definition.

(h) A "tectonic province" is a region of the North American continent characterized by a uniformity of the geologic structural features contained therein.

(i) A "tectonic structure" is a large scale dislocation or distortion within the earth's crust. Its extent is measured in miles.

(j) A "zone requiring detailed faulting investigation" is the zone within which a nuclear power reactor may be located only if a detailed investigation of the regional and local geologic and seismic characteristics of the site is made in order to consider the need to design for surface faulting.

(k) The "control width" of a fault is the maximum width of mapped fault traces, including all Quaternary fault traces which join or can reasonably be inferred to join the main fault trace, measured within 10 miles along the fault's trend in both directions from the point of nearest approach to the site. (See Figure 1)

(l) A "response spectrum" is a plot of the maximum peak responses of a family of idealized single-degree-of-freedom damped oscillators to a specified vibratory motion input at their supports.

IV. Required investigations. The geologic, seismic, and engineering characteristics of a site and its environs shall be investigated in sufficient scope and detail to (1) provide reasonable assurance that they are sufficiently well understood to permit an adequate evaluation of the proposed site, and (2) provide sufficient information to support the determinations required by these criteria and to permit adequate engineering solutions to actual or potential geologic and seismic effects at the proposed site. The size of the region to be investigated and the type of data pertinent to the investigations shall be determined by the nature of the region surrounding the proposed site. The investigations shall be carried out by a review of the pertinent literature and/or field investigations and shall include the steps outlined in (a) through (c).

(a) Required investigation for vibratory ground motion. The purpose of the investigations required by this paragraph is to obtain information needed to describe the

vibratory ground motion produced by the Safe Shutdown Earthquake. All of the steps in subparagraphs IV(a)(5) through IV(a)(8) need not be carried out if the Safe Shutdown Earthquake can be clearly established by investigations and determinations of a lesser scope. The investigations shall include the following:

(1) Determination of the lithologic, stratigraphic, and structural geologic conditions of the site and the region surrounding the site, including its geologic history;

(2) Identification of tectonic structures underlying the site and the region surrounding the site;

(3) Determination of physical evidence concerning behavior during prior earthquakes of the surficial geologic materials and the substrata underlying the site from the lithologic, stratigraphic, and structural geologic studies;

(4) Determination of the static and dynamic engineering properties of the materials underlying the site. Included should be properties needed to determine the behavior of the underlying material during earthquakes and the characteristics of the underlying material in transmitting earthquake-induced motions to the foundations of the plant, such as seismic wave velocities, density, water content, porosity, and strength.

(5) Listing of all historically reported earthquakes which have affected or which could be reasonably expected to have affected the site, including the data of occurrence and the following measured or estimated data: magnitude or highest intensity, and a plot of the epicenter or region of highest intensity. Where historically reported earthquakes could have caused a maximum ground acceleration of at least one-tenth the acceleration of gravity (0.1g) at the foundations of the proposed nuclear powerplant structures, the acceleration or intensity and duration of ground shaking at these foundations shall also be estimated. Since earthquakes have been reported in terms of various parameters, such as magnitude, intensity at a given location, and effect on ground, structures, and people at a specific location, some of these data may have to be estimated by use of appropriate empirical relationships. Where appropriate, the comparative characteristics of the material underlying the epicentral location or region of highest intensity and of the material underlying the site in transmitting earthquake vibratory motion shall be considered.

(6) Correlation of epicenters or regions of highest intensity of historically reported earthquakes, where possible, with tectonic structures, any part of which is located within 200 miles of the site. Epicenters or regions of highest intensity which cannot be reasonably correlated with tectonic structures shall be identified with tectonic provinces, any part of which is located within 200 miles of the site.

(7) For faults, any part of which is within 200 miles² of the site and which may be of significance in establishing the Safe Shutdown Earthquake, determination of whether these faults are to be considered as active faults. This determination is required in order to permit appropriate consideration of the geologic history of such faults in establishing the Safe Shutdown Earthquake. For guidance in determining which faults may be of significance in determining the Safe Shutdown Earthquake, Table 1 presents the minimum length of fault to be considered

² If the Safe Shutdown Earthquake can be associated with a fault closer than 200 miles to the site, the procedures of subparagraphs IV(a)(7) and IV(a)(8) need not be carried out for successively more remote faults.

¹ The definition and use of "active fault" in these criteria is not the same as other definitions generally used by geologists. An active fault is a fault whose geologic history shall be taken into account in evaluating the fault's potential for causing vibratory ground motion or surface faulting. The historic seismicity of a fault shall be taken into account in determining the design basis for vibratory ground motion even though the fault is not considered to be an active fault by these criteria.

versus distance from site. Active faults of lesser length than those indicated in Table 1 and faults which are not active faults generally need not be considered in determining the Safe Shutdown Earthquake, except where unusual circumstances indicate such consideration is appropriate.

TABLE 1

Distance from the site (miles)	Minimum length of fault (miles) to be considered in establishing Safe Shutdown Earthquake
0 to 20.....	1
Greater than 20 to 50.....	5
Greater than 50 to 100.....	10
Greater than 100 to 150.....	20
Greater than 150 to 200.....	40

(8) For faults, any part of which is within 200 miles² of the site which may be of significance in establishing the Safe Shutdown Earthquake and which are considered as active faults, determination of:

(i) The length of the fault;

(ii) The relationship of the fault to regional tectonic structures;

(iii) The nature, amount, and geologic history of displacements along the fault, including particularly the estimated amount of the maximum Quaternary displacement related to any one earthquake along the fault.

(b) *Required investigation for surface faulting.* The purpose of the investigations required by this paragraph is to obtain information to determine whether and to what extent the nuclear power plant need be designed for surface faulting. If the design basis for surface faulting can be clearly established by investigations of a lesser scope, all of the steps in subparagraphs IV(b)(3) through IV(b)(6) need not be carried out. The investigations shall include the following:

(1) Determination of the lithologic, stratigraphic, and structural geologic conditions of the site and the area surrounding the site, including its geologic history;

(2) Determination of geologic evidence of fault offset at or near the ground surface at or near the site;

(3) For faults greater than 1,000 feet long, any part of which is within 5 miles² of the site, determination of whether these faults are to be considered as active faults;

(4) Listing of all historically reported earthquakes which can be reasonably associated with active faults greater than 1,000 feet long, any part of which is within 5 miles² of the site, including the date of occurrence and the following measured or estimated data: Magnitude or highest intensity, and a plot of the epicenter or region of highest intensity;

(5) Correlation of epicenters or regions of highest intensity of historically reported earthquakes with active faults greater than 1,000 feet long, any part of which is located within 5 miles² of the site;

(6) For active faults greater than 1,000 feet long, any part of which is within 5 miles² of the site, determination of:

² If the Safe Shutdown Earthquake can be associated with a fault closer than 200 miles to the site, the procedures of subparagraphs IV(a)(7) and IV(a)(8) need not be carried out for successively more remote faults.

⁴ If the design basis for surface faulting can be determined from a fault closer than 5 miles to the site, the procedures of subparagraphs IV(b)(3) through IV(b)(6) need not be carried out for successively more remote faults.

(i) The length of the fault;

(ii) The relationship of the fault to regional tectonic structures;

(iii) The nature, amount, and geologic history of displacements along the fault, including particularly the estimated amount of the maximum Quaternary displacement related to any one earthquake along the fault; and

(iv) The outer limits of the fault established by mapping Quaternary fault traces for 10 miles along its trend in both directions from the point of its nearest approach to the site.

(c) *Required investigation for seismically induced floods and water waves.* (1) For coastal sites, the investigations shall include the determination of:

(i) Information regarding distantly and locally generated waves or tsunami which have affected or could have affected the site. Available evidence regarding the runup and drawdown associated with historic tsunami in the same coastal region as the site shall also be included.

(ii) Local features of coastal topography which might tend to modify tsunami runup or drawdown. Appropriate available evidence regarding historic local modifications in tsunami runup or drawdown at coastal locations having similar topography to the site shall also be obtained.

(iii) Appropriate geologic and seismic evidence to provide information for establishing the design basis for seismically induced floods or water waves from a local offshore earthquake, from local offshore effects of an onshore earthquake, or from coastal subsidence. This evidence shall be determined, to the extent practical, by a procedure similar to that required in paragraphs IV(a) and IV(b). The probable slip characteristics of offshore faults shall also be considered as well as the potential for offshore slides in submarine material.

(2) For sites located near lakes and rivers, investigations similar to those required in subparagraph (1) shall be carried out, as appropriate, to determine the potential for the nuclear powerplant to be exposed to seismically induced floods and water waves as, for example, from the failure during an earthquake of an upstream dam or from slides of earth or debris into a nearby lake.

V. *Seismic and geologic design bases—(a) Determination of design basis for vibratory ground motion.* The design of each nuclear powerplant shall take into account the potential effects of vibratory ground motion caused by earthquakes. The design basis for the maximum vibratory ground motion is determined through evaluation of the geology and the geologic and seismic history of the site and the surrounding region. The most severe earthquakes associated with tectonic structures or tectonic provinces in the region surrounding the site are identified by considering those historically reported earthquakes that can be associated with these structures or provinces. If faults in the region surrounding the site are active faults, the most severe expected earthquakes associated with these faults are determined by also considering their geologic history. The vibratory ground motion at the site is then determined by assuming that the epicenters or regions of highest intensity of the earthquakes are situated at the point on the tectonic structures or tectonic provinces nearest to the site. The earthquake which could cause the maximum vibratory ground motion at the site is designated the Safe Shutdown Earthquake. The specific procedures for determining the design basis for vibratory ground motion are given in the following sections.

(1) *Determination of Safe Shutdown Earthquake.* The Safe Shutdown Earthquake shall be identified through evaluation of seismic and geologic information developed pursuant to the requirements of paragraph IV(a), as follows:

(i) The historic earthquakes of greatest magnitude or intensity which have been correlated with tectonic structures pursuant to the requirements of subparagraph IV(a)(6) shall be determined. In addition, for active faults, information required by subparagraph IV(a)(8) shall also be taken into account in determining the earthquakes of greatest magnitude related to the faults. The magnitude or intensity of these earthquakes based on geologic evidence may be larger than that of the maximum earthquakes historically recorded. The accelerations at the site shall be determined assuming that the epicenters of the earthquakes of greatest magnitude or the regions of highest intensity related to the tectonic structures are situated at the point on the structures closest to the site.

(ii) Where epicenters or regions of highest intensity of historically reported earthquakes cannot be reasonably related to tectonic structures but are identified pursuant to the requirements of subparagraph IV(a)(6) with tectonic provinces in which the site is located, the accelerations at the site shall be determined assuming that these earthquakes occur adjacent to the site.

(iii) Where epicenters or regions of highest intensity of historically reported earthquakes cannot be reasonably related to tectonic structures but are identified pursuant to the requirements of subparagraph IV(a)(6) with tectonic provinces in which the site is not located, the accelerations at the site shall be determined assuming that the epicenters or regions of highest intensity of these earthquakes are located at the closest point to the site on the boundary of the tectonic province.

(iv) The earthquake producing the maximum vibratory acceleration at the site, as determined from subdivisions (i) through (iii) shall be designated the Safe Shutdown Earthquake for vibratory ground motion, except as noted in subdivision (v). The characteristics of the Safe Shutdown Earthquake shall be derived from more than one earthquake, determined from subdivisions (i) through (iii) where necessary to assure that the maximum vibratory acceleration at the site throughout the frequency range of interest is included. In order to compensate for the limited data, the procedures in subdivisions (i) through (iii) should be applied in a conservative manner. The maximum vibratory accelerations of the Safe Shutdown Earthquake at the foundations of the nuclear power plant structures shall be determined taking into account the characteristics of the underlying soil material in transmitting the earthquake-induced motions, obtained pursuant to subparagraphs IV(a)(1), (3), and (4). The Safe Shutdown Earthquake shall be defined by response spectra corresponding to the maximum vibratory accelerations as outlined in paragraph VI(a).

(v) Where the maximum vibratory accelerations of the Safe Shutdown Earthquake at the foundations of the nuclear power plant structures are determined to be less than one-tenth the acceleration of gravity (0.1g) as a result of the steps required in subdivisions (i) through (iv), it shall be assumed that the maximum vibratory accelerations of the Safe Shutdown Earthquake at these foundations are at least 0.1g.

(2) *Determination of Operating Basis Earthquake.* The Operating Basis Earthquake may be specified by the applicant. If vibratory

ground motion occurs which produces a maximum acceleration above .05g at any foundation of the nuclear power plant structures or which exceeds that of the Operating Basis Earthquake, whichever is greater, shutdown of the nuclear power plant will be required. Prior to resuming operations, the licensee shall demonstrate to the Commission that no functional damage has occurred to features necessary for continued operation.

(b) *Determination of need to design for surface faulting.* In order to determine whether a nuclear powerplant is required to be designed to withstand the effects of surface faulting, the location of the site with respect to active faults shall be considered. The area over which each of these faults has caused surface faulting in the past is identified by mapping its fault traces in the vicinity of the site. The fault traces are mapped along the trend of the fault for 10 miles in both directions from the point of its nearest approach to the site because, for example, traces may be obscured along portions of the fault. The maximum width of the mapped fault traces, called the control width, is then determined from this map. Because surface faulting has sometimes occurred beyond the limit of mapped fault traces, or where fault traces have not been previously recognized, the control width of the fault is increased by a factor which is dependent upon the largest potential earthquake related to the fault. This larger width delineates a zone, called the zone requiring detailed faulting investigation, in which the possibility of surface faulting is to be considered. The following section outlines the specific procedures for determining the zone requiring detailed faulting investigation for an active fault.

(1) *Determination of zone requiring detailed faulting investigation.* The zone requiring detailed faulting investigation for an active fault, which was investigated pursuant to the requirement of subparagraph IV(b)(6), shall be determined through use of the following table:

TABLE 2—DETERMINATION OF ZONE REQUIRING DETAILED FAULTING INVESTIGATION

Magnitude of earthquake	Width of zone requiring detailed faulting investigation (see Figure 1)
Less than 5.5	1 x control width
5.5-6.4	2 x control width
6.5-7.5	3 x control width
Greater than 7.5	4 x control width

The largest magnitude earthquake related to the fault shall be used in Table 2. This earthquake shall be determined from the information developed pursuant to the requirements of paragraph IV(b) for the fault, taking into account the information required by subparagraph IV(b)(6). The control width used in Table 2 is determined by mapping the outer limits of the fault traces from information developed pursuant to subdivision IV(b)(6)(iv). The control width shall be used in Table 2 unless the characteristics of the fault are obscured for a significant portion of the 10 miles on either side of the point of nearest approach to the site. In this event, the use in Table 2 of the width of the fault more than 10 miles from the point of nearest approach to the site may be appropriate.

The zone requiring detailed faulting investigation, as determined from Table 2, shall be used for the fault except where:

(1) The zone requiring detailed faulting investigation from Table 2 is less than one-half mile in width. In this case the zone shall be at least one-half mile in width.

(ii) Definitive evidence concerning the regional and local characteristics of the fault justifies use of a different value.

In delineating the zone requiring detailed faulting investigation for a fault, the center shall coincide with the center of the fault at its point of nearest approach to the site as illustrated in Figure 1.

(c) *Determination of design bases for seismically induced floods and water waves.* The size of seismically induced floods and water waves which could affect a site shall be determined, taking into consideration the results of the investigation required by paragraph IV(c). Local topographic characteristics which might tend to modify the possible run-up and draw-down at the site shall be considered. Adverse tide conditions shall also be taken into account in determining the effect of the floods and waves on the site. The characteristics of the earthquake to be used in evaluating the offshore effects of local earthquakes shall be determined by a procedure similar to that used to determine the characteristics of the Safe Shutdown Earthquake in paragraph V(a).

(d) *Determination of other design conditions—(1) Soil Stability.* Vibratory ground motion associated with the Safe Shutdown Earthquake can cause soil instability due to ground disruption, such as fissuring, differential consolidation, and cratering, which is not directly related to surface faulting. The following geologic features which could affect the foundations of the proposed nuclear powerplant structures shall be evaluated, taking into account the information concerning physical properties of materials underlying the site developed pursuant to subparagraphs IV(a)(1), (3), and (4) and the effects of the Safe Shutdown Earthquake:

(i) Areas of actual or potential surface or subsurface subsidence, uplift, or collapse resulting from:

(a) Natural features such as tectonic depressions and cavernous or karst terrains, particularly those underlain by calcareous or other soluble deposits;

(b) Man's activities, such as withdrawal or addition of subsurface fluids, or mineral extraction;

(c) Regional warping.

(ii) Deformational zones, such as shears, joints, fractures and folds, or combinations of these features.

(iii) Zones of alteration or irregular weathering profiles, and zones of structural weakness composed of crushed or disturbed materials.

(iv) Unrelieved residual stresses in bedrock.

(v) Rocks or soils that might be unstable because of their mineralogy, lack of consolidation, water content, or potentially undesirable response to seismic or other events. Seismic response characteristics to be considered shall include liquefaction, thixotropy, differential consolidation, cratering, and fissuring.

(2) *Slope stability.* Stability of all slopes, both natural and artificial, the failure of which could adversely affect the nuclear powerplant, shall be considered. An assessment shall be made of the potential effects of erosion or deposition, and of combinations of erosion or deposition with seismic activity, taking into account information concerning the physical properties of the materials underlying the site developed pursuant to subparagraphs IV(a)(1), (3), and (4) and the effects of the Safe Shutdown Earthquake.

(3) *Cooling water supply.* Assurance of adequate cooling water supply for emergency and long-term shutdown decay heat removal shall be considered in the design of the nuclear powerplant, taking into account information concerning the physical prop-

erties of the materials underlying the site developed pursuant to subparagraphs IV(a)(1), (3), and (4) and the effects of the Safe Shutdown Earthquake and the design basis for surface faulting. Consideration of river blockage or diversion, coastal uplift or subsidence, or tsunami run-up and draw-down, and of the failure of dams and intake structures shall be included in the evaluation, where appropriate.

VI. *Engineering design criteria.* The engineering design criteria included in this section are intended only for general guidance. More detailed criteria for seismic design of nuclear powerplants are being developed.

(a) *Vibratory ground motion—(1) Safe Shutdown Earthquake.* The vibratory ground motion produced by the Safe Shutdown Earthquake shall be defined by response spectra corresponding to the maximum vibratory accelerations at the elevations of the foundations of the nuclear powerplant structures determined pursuant to subparagraph V(a)(1). The response spectra shall relate the response of the foundations of the nuclear powerplant structures to the vibratory ground motion, considering such foundations to be single-degree-of-freedom damped oscillators and neglecting soil-structure interaction effects. In view of the limited data available on vibratory ground motions of strong earthquakes, it usually will be appropriate that the response spectra be smoothed design spectra, developed from an envelope of spectra related to the measured vibratory motions caused by more than one earthquake.

The nuclear powerplant shall be designed so that, if the Safe Shutdown Earthquake occurs, all structures, systems, and components important to safety will remain functional. These structures, systems, and components are those necessary to assure (1) the integrity of the reactor coolant pressure boundary, (2) the capability to shut down the reactor and maintain it in a safe condition, or (3) the capability to prevent or mitigate the consequences of accidents which could result in potential offsite exposures comparable to the guideline exposures of this part. In addition to seismic loads, including aftershocks, applicable concurrent functional and accident-induced loads shall be taken into account in the design of these safety-related structures, systems, and components. The design of the nuclear powerplant shall also take into account the possible effects of the Safe Shutdown Earthquake on the facility foundations by ground disruption, such as fissuring, differential consolidation, cratering, liquefaction, and landsliding, as required in paragraph V(d).

The engineering method used to insure that the required safety functions are maintained during and after the vibratory ground motion associated with the Safe Shutdown Earthquake shall involve the use of a suitable dynamic analysis, such as a time history method, except where it can be demonstrated that the use of an equivalent static load method provides adequate conservatism. The analysis shall take into account soil-structure interaction effects and the expected duration of vibratory motion. It is permissible to allow strain limits in excess of yield strain in some of these safety-related structures, systems, and components during the Safe Shutdown Earthquake and under the postulated concurrent conditions, provided that the necessary safety functions are maintained.

These safety-related structures, systems, and components shall also be designed to withstand the effects of vibratory motion of at least 50 percent of the Safe Shutdown Earthquake in combination with other appropriate loads well within elastic limits.

(2) *Operating Basis Earthquake.* Where the applicant chooses to design the nuclear powerplant to withstand the effects of an Operating Basis Earthquake, the Operating Basis Earthquake shall be defined by response spectra.

All structures, systems, and components of the nuclear powerplant necessary for power generation shall be designed to withstand the effects of the vibratory motion of the Operating Basis Earthquake in combination with other appropriate loads well within elastic limits.

The engineering method used to insure that all structures, systems, and components necessary for power generation are capable of withstanding the effects of the Operating Basis Earthquake shall involve the use of a suitable dynamic analysis, such as a time history method, except where it can be demonstrated that the use of an equivalent static load method provides adequate conservatism. The analysis shall take into account soil-structure interaction effects and the expected duration of vibratory motion.

(3) *Required seismic instrumentation.* Suitable instrumentation shall be provided so that the seismic response of nuclear powerplant features important to safety can be determined promptly to permit comparison of such response with that used as the design basis. Such a comparison is needed to decide whether the plant can continue to be operated safely and to permit such timely action as may be appropriate.

(b) *Surface faulting.* If the reactor facility is to be located within the zone requiring detailed faulting investigation, a detailed investigation of the regional and local geologic and seismic characteristics of the site shall be carried out to determine the need to take into account surface faulting in the design of the nuclear powerplant. Where it is determined that surface faulting need not be taken into account, sufficient data to clearly justify the determination shall be presented in the license application.

Where it is determined that surface faulting must be taken into account, guidance in establishing the design basis for surface faulting on a site shall be obtained from the data in Technical Information Document 24124, "Historic Surface Faulting in Continental United States and Adjacent Parts of Mexico," by M. G. Bonilla, U.S. Geological Survey, 1967, from the evidence concerning the regional and local geologic and seismic characteristics of the site, and from any other relevant data.

The design basis for surface faulting shall be taken into account in the design of the nuclear powerplant by providing reasonable assurance that in the event of occurrence of such faulting all structures, systems, and components important to safety will remain functional. These structures, systems, and components are those necessary to assure (1) the integrity of the reactor coolant pressure boundary, (2) the capability to shut down the reactor and maintain it in a safe shutdown condition, or (3) the capability to prevent or mitigate the consequences of accidents which could result in potential off-site exposures comparable to the guideline exposures of this part. In addition to seismic loads, including aftershocks, applicable concurrent functional and accident-induced loads shall be taken into account in the design of such safety features. The design provisions shall be based on an assumption that the design basis for surface faulting can occur in any direction and azimuth and under any part of the nuclear powerplant, unless evidence indicates this assumption is not appropriate, and shall take into account the estimated rate at which the surface faulting may occur.

(c) *Seismically-induced floods and water waves and other design conditions.* The design basis for seismically-induced floods and water waves and other design conditions determined pursuant to paragraphs V (c) and

(d), shall be taken into account in the design of the nuclear powerplant so as to prevent undue risk to the health and safety of the public.

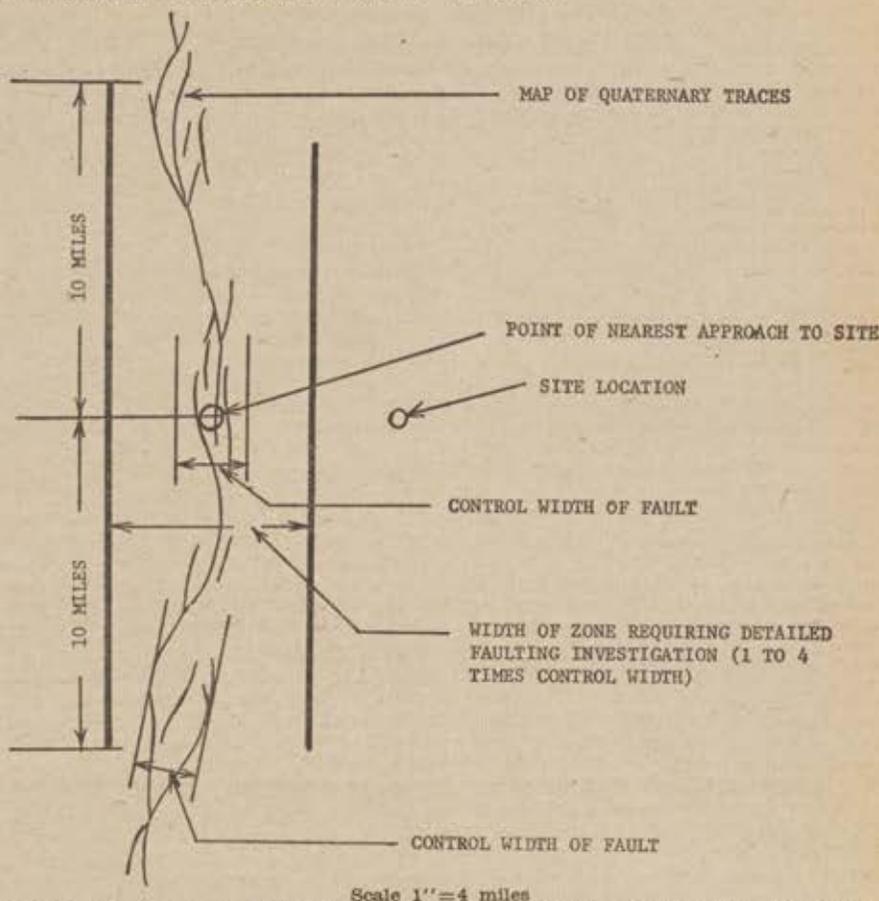


FIGURE 1—Diagrammatic illustration of width of zone requiring detailed faulting investigation for a specific site area.

(Sec. 161 b., 1., 68 Stat. 948 as amended; 42 U.S.C. 2201 (b) (1))

Dated at Germantown, Md., this 18th day of November 1971.

For the Atomic Energy Commission.

W. B. McCool,
Secretary of the Commission.

[FR Doc. 71-17134 Filed 11-24-71; 8:45 am]

**FEDERAL COMMUNICATIONS
COMMISSION**

[47 CFR Parts 2, 21, 89, 91]

[Docket No. 19327]

**ALLOCATION OF FREQUENCIES
Order Extending Time**

In the matter of amendment of Parts 2, 21, 89, and 91 of the Commission's rules with regard to allocation of frequencies in the bands 35.19-35.69 MHz and 43.19-43.69 MHz, Docket No. 19327, RM 1069.

1. The Commission has before it for

consideration a motion for extension of time in the above-named proceeding filed on behalf of the National Association of Radiotelephone Systems (NARS), requesting a 30 days extension in the time for filing comments and reply comments in response to the Commission's notice of proposed rule making (36 F.R. 19916) adopted September 30, 1971.

2. According to NARS a preliminary examination of the Commission's proposed rule making has indicated certain potential problems of interference which were not contemplated in the notice. NARS says the additional time is necessary to enable its consulting engineers to properly study the problem and prepare data for consideration by the Commission.

3. The Commission certainly desires to be fully informed of any potentially serious problems arising from the proposed rules. We appreciate the assistance of NARS in this matter and believe that it has shown good cause for 30 days extension. It does not appear that such an extension would seriously delay the proceeding or inconvenience other parties intending to file.

PROPOSED RULE MAKING

4. *Accordingly, it is ordered*, Pursuant to authority contained in section 5(d) of the Communications Act of 1934, as amended, (47 U.S.C. 155(d)) and § 0.251 (b) of the Commission's rules (47 CFR 0.251(b)), the date for filing comments in this proceeding is extended from November 15, 1971, to December 15, 1971, and the date for filing reply comments is

extended from November 26, 1971, to December 28, 1971.

Adopted: November 12, 1971.

Released: November 15, 1971.

FEDERAL COMMUNICATIONS
COMMISSION,

[SEAL] RICHARD E. WILEY,

General Counsel

[FR Doc.71-17257 Filed 11-24-71;8:53 am]

Notices

DEPARTMENT OF THE TREASURY

Bureau of Customs

HIGH-SPEED TOOL STEEL FROM SWEDEN

Antidumping Proceeding Notice

On October 12, 1971, information was received in proper form pursuant to §§ 153.26 and 153.27, Customs regulations (19 CFR 153.26, 153.27), indicating a possibility that high-speed tool steel from Sweden is being, or likely to be, sold at less than fair value within the meaning of the Antidumping Act, 1921, as amended (19 U.S.C. 160 et seq.).

There is evidence on record concerning injury to or likelihood of injury to or prevention of establishment of an industry in the United States.

Having conducted a summary investigation as required by § 153.29 of the Customs regulations (19 CFR 153.29) and having determined as a result thereof that there are grounds for so doing, the Bureau of Customs is instituting an inquiry to verify the information submitted and to obtain the facts necessary to enable the Secretary of the Treasury to reach a determination as to the fact or likelihood of sales at less than fair value.

A summary of information received from all sources is as follows:

The information received tends to indicate that the prices of the merchandise sold for exportation to the United States are less than the prices for home consumption.

This notice is published pursuant to § 153.30 of the Customs regulations (19 CFR 153.30).

[SEAL] EDWIN F. RAINS,
Acting Commissioner of Customs.

Approved: November 19, 1971.

EUGENE T. ROSSIDES,
*Assistant Secretary
of the Treasury.*

[FR Doc. 71-17247 Filed 11-24-71; 8:52 am]

Internal Revenue Service

[Order No. 30 (Rev. 4)]

ASSISTANT COMMISSIONER (COMPLIANCE) AND DIRECTOR, ALCOHOL, TOBACCO, AND FIREARMS DIVISION

Delegation of Authority Regarding Administration and Enforcement of Laws

1. (a) Pursuant to the authority vested in the Commissioner of Internal Revenue by the regulations in Title 26 of the Code of Federal Regulations implementing

chapters 51, 52, and 53 of the Internal Revenue Code and by Treasury Department Order No. 150-37, dated March 17, 1955, there is hereby delegated to the Assistant Commissioner (Compliance) and the Director, Alcohol, Tobacco, and Firearms Division, the authority to administer and enforce chapters 51, 52, and 53 of the Internal Revenue Code relating, respectively, to distilled spirits, wines, and beer, tobacco, and firearms, including the authority to supervise and regulate the liquor and tobacco industries, and the determination of appeals in administrative proceedings involving the denial of applications for industrial alcohol and tobacco permits and the annulment, revocation, and suspension of such permits.

(b) Pursuant to the authority vested in the Commissioner by Treasury Department Order No. 30, dated June 12, 1940, and No. 150-2, dated May 15, 1952, there is hereby delegated to the Assistant Commissioner (Compliance) and the Director, Alcohol, Tobacco, and Firearms Division, the authority to administer and enforce the Federal Alcohol Administration Act (27 U.S.C. chapter 8), including the authority to accept or reject offers in compromise submitted pursuant to such Act, and the determination of appeals in administrative proceedings involving the denial of applications for beverage permits and the annulment, revocation, and suspension of such permits.

(c) Pursuant to the authority vested in the Commissioner by 26 CFR Part 178, there is hereby delegated to the Assistant Commissioner (Compliance) and the Director, Alcohol, Tobacco, and Firearms Division, the authority to administer and enforce 18 U.S.C. chapter 44, relating to firearms and including the determination of appeals in administrative proceedings involving the denial of applications for firearms licenses and the revocation of such licenses; and title VII of the Omnibus Crime Control and Safe Streets Act of 1968 (18 U.S.C. appendix), as amended, relating to unlawful possession or receipt of firearms; and pursuant to the authority so vested by 26 CFR Part 180, authority is hereby delegated to the Assistant Commissioner (Compliance) and the Director, Alcohol, Tobacco, and Firearms Division, the authority to administer and enforce section 414 of the Mutual Security Act of 1954, as amended (22 U.S.C. 1934), relating to the control of the importation of arms, ammunition and implements of war.

(d) Pursuant to the authority vested in the Commissioner by Treasury Decision 4662, dated July 3, 1936, and Treasury Department Order No. 150-2, dated May 15, 1952, there is hereby delegated to the Assistant Commissioner (Compliance) and the Director, Alcohol, To-

bacco, and Firearms Division, the authority to administer and enforce 18 U.S.C. 1262-1265, 3615, relating to the liquor traffic.

(e) Pursuant to the authority vested in the Commissioner by Treasury Department Order No. 149, dated March 5, 1952, and No. 150-2, dated May 15, 1952, there is hereby delegated to the Assistant Commissioner (Compliance) and the Director, Alcohol, Tobacco, and Firearms Division, the authority to remit or mitigate forfeitures of:

(i) Personal property seized as subject to administrative forfeiture under internal revenue laws, and

(ii) Vessels, vehicles, or aircraft seized as subject to administrative forfeiture under the customs laws for transporting or concealment therein in violation of the Act of August 9, 1939 (49 U.S.C. chapter 11), of firearms in respect of which there have been violations of chapter 53 of the Internal Revenue Code.

(f) Pursuant to the authority vested in the Commissioner by Treasury Department Order No. 150-45 (Rev. No. 2), dated October 15, 1970, and 26 CFR Part 181, there is hereby delegated to the Assistant Commissioner (Compliance) and the Director, Alcohol, Tobacco, and Firearms Division, the authority to administer and enforce 18 U.S.C. chapter 40, relating to explosives and including the determination of appeals in administrative proceedings involving the denial of applications for explosive licenses and permits and the revocation of such licenses and permits.

(g) Pursuant to the authority vested in the Commissioner by 26 CFR Parts 178 and 181, relating to applications for relief from firearms or explosives disabilities filed under 18 U.S.C. 925(c) or 18 U.S.C. 845(b), there is hereby delegated to the Assistant Commissioner (Compliance) and the Director, Alcohol, Tobacco, and Firearms Division, the authority to take final action on such applications.

2. The authorities delegated under paragraph 1 (a)-(f) hereof may be redelegated but not below the position of Assistant Director, except that specified routine actions required in processing documents involving firearms actions may be further redelegated to the Chief, Firearms and Explosives Branch, and to coordinators in that Branch.

3. The authority delegated under paragraph 1(g) may not be redelegated.

4. This order supersedes Delegation Order No. 31 (Rev. 3) issued September 10, 1971.

Date of issuance: November 19, 1971.

Effective date: November 19, 1971.

[SEAL] JOHNNIE M. WALTERS,
Commissioner.

[FR Doc. 71-17248 Filed 11-24-71; 8:51 am]

DEPARTMENT OF THE INTERIOR

Bureau of Land Management

[Colorado 0102703]

COLORADO

Notice of a Partial Termination of Proposed Withdrawal and Reservation of Lands

NOVEMBER 18, 1971.

Notice of a Bureau of Reclamation, U.S. Department of the Interior application, Colorado 0102703, for withdrawal and reservation of lands for reclamation purposes in connection with the Fryngpan-Arkansas Project, was published as FEDERAL REGISTER Document No. 63-1923, on pages 1686 and 1687 of the issue for Thursday, February 21, 1963. The applicant agency has canceled its application insofar as it affects the following described lands:

SIXTH PRINCIPAL MERIDIAN, COLORADO

T. 7 S., R. 85 W.,

Sec. 36: S $\frac{1}{2}$ SE $\frac{1}{4}$, containing 80 acres.

Therefore, pursuant to the regulations contained in 43 CFR Part 2091.2-5(b) (1), such lands, at 10 a.m., on December 24, 1971, will be relieved of the segregative effect of the above mentioned application.

ALLAN E. ARNOLD,
Acting Chief,

Division of Technical Services.

[FR Doc. 71-17217 Filed 11-24-71; 8:49 am]

[I-4701]

IDAHO

Notice of Offer of Lands

NOVEMBER 15, 1971.

1. Pursuant to the provisions of the Act of May 31, 1962 (76 Stat. 89), the following lands, found upon survey to be omitted lands of the United States, will be offered for sale:

BOISE MERIDIAN, IDAHO

T. 3 N., R. 37 E.

Sec. 1, lots 10 and 11;
Sec. 2, lots 8, 12, 13, 14, and 16;
Sec. 12, lots 10, 13, 14, and 17;
Sec. 13, lots 10, 11, and 12;
Sec. 24, lots 9, 10, 11, and 12.

The areas described aggregate 264.41 acres.

2. Plats of survey were filed in the Land Office, Boise, Idaho, at 10 a.m. on November 3, 1969.

3. Persons claiming a preference right in accordance with the provisions of the Act, must file with the Idaho State Office, Room 334, Federal Building, 550 West Fort Street, Boise, ID 83702, before January 20, 1972, a notice of their intention to apply to purchase all or part of the lands as qualified preference right claimants.

4. The Act grants a preference right to purchase the above lands to any citizens of the United States (including corporations, partnership, firm, or other legal entity having authority to hold title

to lands in the State of Idaho) who, in good faith, under color of title or claiming as a riparian owner has, prior to March 30, 1961, placed valuable improvements upon, reduced to cultivation, or occupied any of the lands so offered for sale, or whose ancestors or predecessors in interest have taken such action.

5. The lands are determined to be suitable for sale and will be sold at their fair market value subject to:

(a) Qualified preference right claims.

(b) A reservation to the United States of all the coal, oil, gas, shale, phosphate, potash, sodium, native asphalt, solid and semisolid bitumen and bitumen rock, including oil-impregnated rock or sands from which oil is recoverable only by special treatment after the deposit is mined or quarried.

(c) The following reservations:

(1) A right-of-way easement for existing flood control dikes.

(2) A reservation of a 100-foot strip of land along the river banks of the lots bordering the Snake River for use of the public for access and recreation.

RICHARD H. PETRIE,
Chief,

Division of Technical Services.

[FR Doc. 71-17210 Filed 11-24-71; 8:49 am]

DEPARTMENT OF COMMERCE

Office of Import Programs

UNIVERSITY OF IOWA ET AL.

Notice of Applications for Duty-Free Entry of Scientific Articles

The following are notices of the receipt of applications for duty-free entry of scientific articles pursuant to section 6(c) of the Educational, Scientific, and Cultural Materials Importation Act of 1966 (Public Law 89-651; 80 Stat. 897). Interested persons may present their views with respect to the question of whether an instrument or apparatus of equivalent scientific value for the purposes for which the article is intended to be used is being manufactured in the United States. Such comments must be filed in triplicate with the Director, Special Import Programs Division, Office of Import Programs, Washington, D.C. 20230, within 20 calendar days after the date on which this notice of application is published in the FEDERAL REGISTER.

Amended regulations issued under cited Act, as published in the October 14, 1969, issue of the FEDERAL REGISTER, prescribe the requirements applicable to comments.

A copy of each application is on file, and may be examined during ordinary Commence Department business hours at the Special Import Programs Division, Department of Commerce, Washington, D.C.

Docket No. 72-00065-33-46040. Applicant: The University of Iowa, Iowa City, Iowa 52240. Article: Electron microscope, Model Elmiskop 101 and accessories. Manufacturer: Siemens A.G., West Germany. Intended use of article: The arti-

cle will be used to study biological tissue specimens removed from mammalian reproductive tracts and certain portions of the central nervous system in investigations directed toward a better understanding of the mechanism of action of contraceptive devices and drugs. These investigations are related to a multidisciplinary approach to the problem of interference with implementation of the fertilized ovum, and employment of existing drugs to enhance the effect of current contraceptive measures, as well as possible design of new and different contraceptive drugs. The article will also be used in a lecture and laboratory course covering all aspects of electron microscopy. Application received by Commissioner of Customs: July 29, 1971.

Docket No. 72-00066-33-46040. Applicant: University of Iowa, Department of Zoology, Iowa City, Iowa 52240. Article: Electron microscope, Model EM 300. Manufacturer: Philips Electronic Instruments, The Netherlands. Intended use of article: The article will be used for research studies which include the following:

1. Studies on the biogenesis of the cytoplasmic organelle called the "peroxisome" to establish the relation between enzyme induction and organelle development.

2. Study of sections of organs which must be seen distinctly at low magnification and photographed in order to locate and identify specific cell types which are then studied at intermediate and high magnification to analyze their structural characteristics.

3. Characterization of the structure and composition of a cytoplasmic component believed to represent stored gene product.

Application received by Commissioner of Customs: July 29, 1971.

Docket No. 72-00067-01-11000. Applicant: Southern Illinois University, Edwardsville, Ill. 62025. Article: Gas chromatograph-mass spectrometer. Manufacturer: Varian MAT III G.m.b.T., West Germany. Intended use of article: The article is intended to be used in the following courses:

1. Chemistry 432-8 (4.4) Instrumental Analytical Measurements;

2. Chemistry 446-4 Qualitative Organic Analysis;

3. Chemistry 455-2 (1.1) Experimental Methods in Biochemistry;

4. Chemistry 496-2 to 6 Chemical Problems; and

5. Chemistry 596-1 to 2 Advanced Chemical Problems.

The objectives of these courses are to: elucidate chemical behavior at the molecular level; assist in the professional chemical training of undergraduate students; and to acquaint the chemistry student with expeditious modern laboratory techniques. Application received by Commissioner of Customs: August 2, 1971.

Docket No. 72-00068-33-46500. Applicant: Temple University, School of Dentistry, Electron Microscope Laboratory,

3223 North Broad Street, Philadelphia, PA 19140. Article: Ultramicrotome, Om U2. Manufacturer: C. Reichert Optische Werke A.G., West Germany. Intended use of article: The article is to be used to section X-irradiated parotid gland tissues of 50 angstrom units thickness or less for electron microscopy. This work is part of a research project designed to elucidate the subcellular events in the parotid gland acinar cells following administration of low doses of X-irradiation. Application received by Commissioner of Customs: August 2, 1971.

Docket No. 72-00069-01-77030. Applicant: Temple University School of Medicine, 3420 North Broad Street, Philadelphia, PA 19140. Article: NMR Spectrometer, Model JNM-MH-60-II. Manufacturer: Japan Electron Optics Laboratory Co., Ltd., Japan. Intended use of article: The article will be used in experiments on organic chemicals of biological interest, and their interaction with metal ions and biological macromolecules. In addition, the article will be used for training of students in nuclear magnetic resonance spectroscopy techniques. Application received by Commissioner of Customs: August 2, 1971.

Docket No. 72-00071-75-46070. Applicant: University of California, Los Alamos Scientific Laboratory, Post Office Box 990, Los Alamos, CA 87544. Article: Scanning electron microscope, JSM-U3. Manufacturer: Japan Electron Optics Laboratory Co., Ltd., Japan. Intended use of article: The article is intended to be used to study the physical, mechanical microstructural, and transport properties of potential reactor fuels and clads and to apply the apparatus also to the post-irradiation examination of fast breeder reactor experimental fuel elements. Application received by Commissioner of Customs: August 2, 1971.

Docket No. 72-00072-33-46040. Applicant: New York State Office of General Services, Alfred E. Smith State Office Building, Albany, N.Y. 12225. Article: Electron microscope, Model EM-7. Manufacturer: Associated Electronic Industries, United Kingdom. Intended use of article: The article will be used for a wide range of biological and medical studies; including the examination of living cells, whole and component parts, normal and abnormal; and whole microorganisms including bacteria and viruses. Application received by Commissioner of Customs: August 2, 1971.

Docket No. 72-00073-01-77040. Applicant: University of Utah, Purchasing Department, Salt Lake City, Utah 84112. Article: Mass spectrometer, CH-7. Manufacturer: Varian MAT, West Germany. Intended use of article: The article will be used as an integral component of new instrumentation being constructed for the specific purpose of sequencing peptide molecules and peptide derivatives. Application received by Commissioner of Customs: August 2, 1971.

Docket No. 72-00074-01-42900. Applicant: Columbia University, Department of Chemistry, Broadway at 116th Street, New York, NY 10027. Article: Superconducting magnet. Manufacturer: Oxford

Instrument Co., United Kingdom. Intended use of article: The article is intended to be used in experiments designed to study the shift of microwave absorption frequencies, and its relation to molecular magnetism. Application received by Commissioner of Customs: August 2, 1971.

Docket No. 72-00075-01-90000. Applicant: University of Oklahoma Medical Center, c/o Central Shipping & Receiving, 600 North Oklahoma, Oklahoma City, OK 73104. Article: Rotating anode X-ray generator, GX6. Manufacturer: Elliot Automation Radar Systems Ltd., United Kingdom. Intended use of article: The article is intended to be used to provide high intensity X-radiation for single crystal X-ray diffraction studies of proteins. Application received by Commissioner of Customs: August 2, 1971.

Docket No. 72-00076-33-77040. Applicant: Galesburg State Research Hospital, 1801 North Seminary Street, Galesburg, IL 61401. Article: Gas chromatograph/mass spectrometer, CH 7. Manufacturer: Varian MAT, West Germany. Intended use of article: The article is intended to be used for biochemical analyses of body fluids from patients with mental diseases particularly schizophrenia, to determine whether or not there is a biochemical abnormality in this group of diseases. Application received by Commissioner of Customs: August 5, 1971.

Docket No. 72-00077-33-43780. Applicant: University of Cincinnati, College of Medicine, Eden and Bethesda Avenues, Cincinnati, OH 45219. Article: Laryngo-Schrotronstroboscope KS3. Manufacturer: Rolf Timcke, West Germany. Intended use of article: The article will be used to teach medical students, interns and residents the anatomic and physiologic action of the vocal cords and the voice box. Application received by Commissioner of Customs: August 5, 1971.

Docket No. 72-00078-33-46040. Applicant: Southwest Missouri State College, 901 South National, Springfield, MO 65802. Article: Electron microscope, Model HU-11F. Manufacturer: Hitachi Perkin-Elmer, Japan. Intended use of article: The article is intended to be used in various research projects which include:

1. Direct and indirect study of non-crystalline biomolecules;
2. Ultrastructural study of light-induced changes in tomato pith cells;
3. Significance of the different properties of various plant peroxidases as marker proteins in protein tracer studies;
4. A study on the development or more specific enzyme localizations at the ultrastructural level; and
5. Origin, transport, and deposition of induced peroxidase protein in plant cell walls.

The article will also be used in teaching a course, "Methods in Electron Microscopy" to graduate students. Application received by Commissioner of Customs: August 5, 1971.

Docket No. 72-00079-65-42000. Applicant: Iowa State University, Ames Laboratory, Ames, Iowa 50010. Article: Interference flatness tester. Manufacturer: Carl Zeiss, West Germany. Intended use of article: The article will be used to measure flatness of alkali halide crystals prior to use in diffusion experiments. Application received by Commissioner of Customs: August 5, 1971.

Docket No. 72-00080-65-01100. Applicant: Iowa State University, Ames Laboratory, Ames, Iowa 50010. Article: Particle size analyzer. Manufacturer: Carl Zeiss, West Germany. Intended use of article: The article is intended to be used for quantitative study of crystalline defects and void formation in radiation damage investigation by transmission electron microscopy. Application received by Commissioner of Customs: August 5, 1971.

Docket No. 72-00081-91-80300. Applicant: University of Alaska, Geophysical Institute, College, Alaska 99701. Article: Temperature recorder. Manufacturer: Grant Instruments (Developments) Ltd., United Kingdom. Intended use of article: The article is intended to be used for research on tundra revegetation studies. Application received by Commissioner of Customs: August 5, 1971.

Docket No. 72-00082-33-46040. Applicant: Veterans Administration Hospital, 3350 La Jolla Village Drive, San Diego, CA 92161. Article: Electron microscope, Model Elmiskop 101. Manufacturer: Siemens A. G., West Germany. Intended use of article: The article is intended to be used for the following diagnostic purposes:

- (1) Renal, liver, muscle and nerve, brain and tumor biopsies;
- (2) Examination of smears from body secretion for the identification of viral particles;
- (3) Study of sedimentation pellets of body fluid;
- (4) Identification of viruses from biopsy specimens grown in cultures.

The article will also be used to train young pathologists in both technical and interpretive aspects of electron microscopy as a diagnostic tool in pathology. Application received by Commissioner of Customs: August 5, 1971.

Docket No. 72-00083-55-17500. Applicant: Oregon State University, Business Office, Post Office Box 1086, Corvallis, OR 97331. Article: Recording current meter, Model 4. Manufacturer: Ivar Aanderaa, Norway. Intended use of article: The article is intended to be used in a research effort to define the response of the upper layer of the ocean to the stress of winds along the surface. Application received by Commissioner of Customs: August 9, 1971.

Docket No. 72-00084-88-46070. Applicant: University of Delaware, Newark, Del. 19711. Article: Scanning electron microscope, IIA. Manufacturer: Cambridge Scientific Instruments Ltd., United Kingdom. Intended use of article: The article will be used in the investigation of the detailed microstructure and topography of mineral, fossil, biological, and other specimens. In addition, the

article will be used to instruct advanced undergraduate students in the field of micropaleontology and mineralogy. Application received by Commissioner of Customs; August 9, 1971.

Docket No. 72-00085-99-26000. Applicant: Nelson County Vocational School Extension, Post Office Box 160, Bardstons, KY 40004. Article: Dr. Clemenz, standard construction device for the theory of electricity. Manufacturer: Dr. Clemenz, West Germany. Intended use of article: The article will be used in classes in electricity for teaching the basic theory of electricity. Application received by Commissioner of Customs; August 9, 1971.

Docket No. 72-00086-33-46040. Applicant: Ohio Agricultural Research and Development Center, Wooster, Ohio 44691. Article: Electron microscope, Elmiskop 101. Manufacturer: Siemens A.G., West Germany. Intended use of article: The article is intended to be used in research projects ranging from the investigation of plant virus pathology of soybean, corn and wheat—involving local lesion formation mechanisms, virus location within the tissue and general ultrastructural phenomena resulting from the infection—to pathological conditions in animals such as TGE virus in swine. Application received by Commissioner of Customs; August 9, 1971.

Docket No. 72-00087-00-76540. Applicant: University of Texas, Department of Astronomy, 407 Physics Building, Austin, TX 78712. Article: Four image slicers with accessories. Manufacturer: E. Harvey Richardson, Canada. Intended use of article: The article is intended to be used in astronomical research with a spectrograph. Application received by Commissioner of Customs; August 9, 1971.

SETH M. BODNER,
Director,
Office of Import Programs.

[FR Doc.71-17195 Filed 11-24-71; 8:48 am]

COLLEGE OF MEDICINE AND DENTISTRY OF NEW JERSEY

Notice of Decision on Application for Duty-Free Entry of Scientific Article

The following is a decision on an application for duty-free entry of a scientific article pursuant to section 6(c) of the Educational, Scientific, and Cultural Materials Importation Act of 1966 (Public Law 89-651, 80 Stat. 897) and the regulations issued thereunder as amended (34 F.R. 15787 et seq.).

A copy of the record pertaining to this decision is available for public review during ordinary business hours of the Department of Commerce, at the Office of Import Programs, Department of Commerce, Washington, D.C.

Docket No. 71-00487-33-46500. Applicant: College of Medicine and Dentistry of New Jersey at Newark, 100 Bergen Street, Newark, NJ 07103. Article: Ultramicrotome, Model LKB 8800A. Manufacturer: LKB Produkter A.B., Sweden.

Intended use of article: The article will be used to study biological materials,

mainly embryonic hearts that exhibit normal and pathological structures after the administration of various teratogens, especially nicotine. Research will be concentrated on the development of a heart with special emphasis on the endocardial cushion tissue.

Comments: No comments have been received with respect to this application.

Decision: Application approved. No instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, is being manufactured in the United States.

Reasons: Examination of the applicant's thin sections under the electron microscope will provide optimal information when such sections are uniform in thickness and have smoothly cut surfaces. Conditions for obtaining high quality sections depend to a large extent on the properties of the specimen being sectioned (e.g., hardness, consistency, toughness, etc.), the properties of the embedding media and the geometry of the block. In connection with a prior case (Docket No. 69-00665-33-46500) which relates to the duty-free entry of an identical foreign article, the Department of Health, Education, and Welfare (HEW) advised that "Smooth cuts are obtained when the speed of cutting, (among such [other] factors as knife edge condition and angle), is adjusted to the characteristics of the material being sectioned. The range of cutting speeds and a capability for the higher cutting speeds is, therefore, a pertinent characteristic of the ultra microtome to be used for sectioning materials that experience has shown difficult to section."

In connection with another prior case (Docket No. 70-00077-33-46500) relating to the duty-free entry of an identical foreign article, HEW advised that "ultrathin sectioning of a variety of tissues having a wide range in density, hardness, etc." requires a maximum range in cutting speed and, further, that "The production of ultrathin serial sections of specimens that have great variation in physical properties is very difficult." The foreign article has a cutting speed range of 0.1 to 20 millimeters/second (mm./sec.). The most closely comparable domestic instrument is the Model MT-2B ultramicrotome manufactured by Ivan Sorvall, Inc. (Sorvall). The Sorvall Model MT-2B ultramicrotome has a cutting speed range of 0.09 to 3.2 mm./sec.

We are advised by HEW in its memorandum of August 27, 1971, that cutting speeds in excess of 4 mm./sec. are pertinent to the applicant's ultrastructural study of developing endocardial cushion tissue in embryonic heart in which soft embedded specimens or specimens difficult to section may be encountered. HEW cites as a precedent its prior recommendation relating to Docket No. 71-00147-33-46500 which conforms in many particulars to the captioned application.

We, therefore, find that the Model MT-2B ultramicrotome is not of equivalent scientific value to the foreign article,

for such purposes as this article is intended to be used.

The Department of Commerce knows of no other instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, which is being manufactured in the United States.

SETH M. BODNER,
Director,
Office of Import Programs.

[FR Doc.71-17183 Filed 11-24-71; 8:46 am]

DARTMOUTH COLLEGE

Notice of Decision on Application for Duty-Free Entry of Scientific Article

The following is a decision on an application for duty-free entry of a scientific article pursuant to section 6(c) of the Educational, Scientific, and Cultural Materials Importation Act of 1966 (Public Law 89-651, 80 Stat. 897) and the regulations issued thereunder as amended (34 F.R. 15787 et seq.).

A copy of the record pertaining to this decision is available for public review during ordinary business hours of the Department of Commerce, at the Office of Import Programs, Department of Commerce, Washington, D.C.

Docket No. 71-00531-33-46500. Applicant: Dartmouth College, Hanover, N.H. 03755. Article: Ultramicrotome, Model LKB 8800A. Manufacturer: LKB Produkter A.B., Sweden.

Intended use of article: The article will be used to study biological substances, consisting of normal and tumor cells, from both animals and man, growing on plastic petri dishes. Investigations concern the interactions between cells under a variety of experimental conditions, involving the sectioning of monolayers of cells.

Comments: No comments have been received with respect to this application.

Decision: Application approved. No instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, is being manufactured in the United States.

Reasons: Examination of the applicant's thin sections under the electron microscope will provide optimal information when such sections are uniform in thickness and have smoothly cut surfaces. Conditions for obtaining high quality sections depend to a large extent on the properties of the specimen being sectioned (e.g., hardness, consistency, toughness, etc.), the properties of the embedding media and the geometry of the block. In connection with a prior case (Docket No. 69-00665-33-46500) which relates to the duty-free entry of an identical foreign article, the Department of Health, Education, and Welfare (HEW) advised that "Smooth cuts are obtained when the speed of cutting (among such [other] factors as knife edge condition and angle), is adjusted to the characteristics of the material being sectioned. The range of cutting speeds and a capability for the higher cutting speeds is,

therefore, a pertinent characteristic of the ultra microtome to be used for sectioning materials that experience has shown difficult to section."

In connection with another prior case (Docket No. 70-00077-33-46500) relating to the duty-free entry of an identical foreign article, HEW advised that "ultrathin sectioning of a variety of tissues having a wide range in density, hardness, etc." requires a maximum range in cutting speed and, further, that "The production of ultrathin serial sections of specimens that have great variation in physical properties is very difficult." The foreign article has a cutting speed range of 0.1 to 20 millimeters/second (mm./sec.). The most closely comparable domestic instrument is the Model MT-2B ultramicrotome manufactured by Ivan Sorvall, Inc. (Sorvall). The Sorvall Model MT-2B ultramicrotome has a cutting speed range of 0.09 to 3.2 mm./sec.

We are advised by HEW in its memorandum of September 10, 1971, that cutting speeds in excess of 4 mm./sec. are pertinent to ultrathin serial sectioning of the softer or more difficultly cut specimens of tissue culture cells encountered in the applicant's studies involving analysis of cell-cell junction and microtubules. HEW cites as a precedent its prior recommendation relating to Docket No. 71-00307-33-46500 which conforms in many particulars with the captioned application.

We, therefore, find that the Model MT-2B ultramicrotome is not of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used.

The Department of Commerce knows of no other instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, which is being manufactured in the United States.

SETH M. BODNER,
Director,

Office of Import Programs.

[FR Doc.71-17184 Filed 11-24-71;8:46 am]

JOHNS HOPKINS UNIVERSITY

Notice of Decision on Application for Duty-Free Entry of Scientific Article

The following is a decision on an application for duty-free entry of a scientific article pursuant to section 6(c) of the Educational, Scientific, and Cultural Materials Importation Act of 1966 (Public Law 89-651, 80 Stat. 897) and the regulations issued thereunder as amended (34 F.R. 15787 et seq.).

A copy of the record pertaining to this decision is available for public review during ordinary business hours of the Department of Commerce, at the Office of Import Programs, Department of Commerce, Washington, D.C.

Docket No. 71-00586-00-46040. Applicant: Johns Hopkins University, Charles and 34th Streets, Baltimore, MD 21218. Article: Film cassette and kit. Manufacturer: Siemens A.G., West Germany.

Intended use of article: The article will be used with an existing Elmiskop 1A electron microscope.

Comments: No comments have been received with respect to this application.

Decision: Application approved. No instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, is being manufactured in the United States.

Reasons: The application relates to accessories for an instrument that had been previously imported for the use of the applicant institution. The article is being furnished by the manufacturer which produced the instrument with which the article is intended to be used.

The Department of Commerce knows of no similar accessories being manufactured in the United States, which is interchangeable with or can be readily adapted to the instrument with which the foreign article is intended to be used.

SETH M. BODNER,
Director,

Office of Import Programs.

[FR Doc.71-17185 Filed 11-24-71;8:47 am]

MAYO FOUNDATION

Notice of Decision on Application for Duty-Free Entry of Scientific Article

The following is a decision on an application for duty-free entry of a scientific article pursuant to section 6(c) of the Educational, Scientific, and Cultural Materials Importation Act of 1966 (Public Law 89-651, 80 Stat. 897) and the regulations issued thereunder as amended (34 F.R. 15787 et seq.).

A copy of the record pertaining to this decision is available for public review during ordinary business hours of the Department of Commerce, at the Office of Import Programs, Department of Commerce, Washington, D.C.

Docket No. 71-00477-33-46500. Applicant: Mayo Foundation, 200 First Street Southwest, Rochester, MN 55901. Article: Ultramicrotome, Model LKB 8800A. Manufacturer: LKB Produkter A.B., Sweden.

Intended use of article: The article will be used for studies on viral diseases of the skin, tumors of the skin, ultrastructural histochemical techniques of the skin, and immuno-ultrastructural techniques of the skin in progress. Educational use will be in courses in graduate training and for thesis work investigating biologic and pathologic problems of the skin by ultrastructural methods.

Comments: No comments have been received with respect to this application.

Decision: Application approved. No instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, is being manufactured in the United States.

Reasons: Examination of the applicant's thin sections under the electron microscope will provide optimal information when such sections are uniform in thickness and have smoothly cut sur-

faces. Conditions for obtaining high quality sections depend to a large extent on the properties of the specimen being sectioned (e.g., hardness, consistency, toughness, etc.), the properties of the embedding media and the geometry of the block. In connection with a prior case (Docket No. 69-00665-33-46500) which relates to the duty-free entry of an identical foreign article, the Department of Health, Education, and Welfare (HEW) advised that "Smooth cuts are obtained when the speed of cutting (among such [other] factors as knife edge condition and angle), is adjusted to the characteristics of the material being sectioned. The range of cutting speeds and a capability for the higher cutting speeds is, therefore, a pertinent characteristic of the ultra microtome to be used for sectioning materials that experience has shown difficult to section."

In connection with another prior case (Docket No. 70-00077-33-46500) relating to the duty-free entry of an identical foreign article, HEW advised that "ultrathin sectioning of a variety of tissues having a wide range in density, hardness etc." requires a maximum range in cutting speed and, further, that "The production of ultrathin serial sections of specimens that have great variation in physical properties is very difficult." The foreign article has a cutting speed range of 0.1 to 20 millimeters/second (mm./sec.). The most closely comparable domestic instrument is the Model MT-2B ultramicrotome manufactured by Ivan Sorvall, Inc. (Sorvall). The Sorvall Model MT-2B ultramicrotome has a cutting speed range of 0.09 to 3.2 mm./sec.

We are advised by HEW in its memorandum of August 20, 1971, that cutting speeds in excess of 4 mm./sec. are pertinent to the applicant's ultrastructural study of viral disease of the skin which requires uniform ultrathin sections of material which is difficult to section. HEW cites as a precedent its prior recommendation relating to Docket No. 70-00678-33-46500 which conforms in many particulars to the captioned application.

We, therefore, find that the Model MT-2B ultramicrotome is not of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used.

The Department of Commerce knows of no other instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, which is being manufactured in the United States.

SETH M. BODNER,
Director,

Office of Import Programs.

[FR Doc.71-17188 Filed 11-24-71;8:47 am]

MIAMI UNIVERSITY

Notice of Decision on Application for Duty-Free Entry of Scientific Article

The following is a decision on an application for duty-free entry of a scientific article pursuant to section 6(c) of the Educational, Scientific, and Cultural

Materials Importation Act of 1966 (Public Law 89-651, 80 Stat. 897) and the regulations issued thereunder as amended (34 F.R. 15787 et seq.).

A copy of the record pertaining to this decision is available for public review during ordinary business hours of the Department of Commerce, at the Office of Import Programs, Department of Commerce, Washington, D.C.

Docket No. 71-00486-33-46500. Applicant: Miami University, Oxford, Ohio 45056. Article: Ultramicrotome, Model LKB 8800A. Manufacturer: LKB Produkter, A.B., Sweden.

Intended use of article: The article will be used for research directed toward the production by cells of secretory materials, both for digestion and for formation of connective tissue matrices. Another project concerns the production of structures within spermatocyte nuclei and the investigation of their biochemical constituents.

Comments: No comments have been received with respect to this application.

Decision: Application approved. No instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, is being manufactured in the United States.

Reasons: Examination of the applicant's thin sections under the electron microscope will provide optimal information when such sections are uniform in thickness and have smoothly cut surfaces. Conditions for obtaining high quality sections depend to a large extent on the properties of the specimen being sectioned (e.g., hardness consistency, toughness, etc.), the properties of the embedding media and the geometry of the block. In connection with a prior case (Docket No. 69-00665-33-46500) which relates to the duty-free entry of an identical foreign article, the Department of Health, Education, and Welfare (HEW) advised that "Smooth cuts are obtained when the speed of cutting (among such [other] factors as knife edge condition and angle), is adjusted to the characteristics of the material being sectioned. The range of cutting speeds and a capability for the higher cutting speeds is, therefore, a pertinent characteristic of the ultramicrotome to be used for sectioning materials that experience has shown difficult to section."

In connection with another prior case (Docket No. 70-00077-33-46500) relating to the duty-free entry of an identical foreign article, HEW advised that "ultrathin sectioning of a variety of tissues having a wide range in density, hardness etc." requires a maximum range in cutting speed and, further, that "The production of ultrathin serial sections of specimens that have great variation in physical properties is very difficult." The foreign article has a cutting speed range of 0.1 to 20 millimeters/second (mm./sec.). The most closely comparable domestic instrument is the Model MT-2B ultramicrotome manufactured by Ivan Sorvall, Inc. (Sorvall). The Sorvall Model MT-2B ultramicrotome has a cutting speed range of 0.09 to 3.2 mm./sec.

We are advised by HEW in its memorandum of August 27, 1971, that cutting speeds in excess of 4 mm./sec. are pertinent to the sectioning of the very soft embedded specimens encountered in the applicant's studies of secretory mucins in relation to connective tissue. HEW cites as a precedent its prior recommendation relating to Docket No. 71-00170-33-46500 which conforms in many particulars to the captioned application.

We, therefore, find that the Model MT-2B ultramicrotome is not of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used.

The Department of Commerce knows of no other instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, which is being manufactured in the United States.

SETH M. BODNER,

Director,

Office of Import Programs.

[FR Doc.71-17187 Filed 11-24-71;8:47 am]

MICHIGAN STATE UNIVERSITY

Notice of Decision on Application for Duty-Free Entry of Scientific Article

The following is a decision on an application for duty-free entry of a scientific article pursuant to section 6(c) of the Educational, Scientific, and Cultural Materials Importation Act of 1966 (Public Law 89-651, 80 Stat. 897) and the regulations issued thereunder as amended (34 F.R. 15787 et seq.).

A copy of the record pertaining to this decision is available for public review during ordinary business hours of the Department of Commerce, at the Office of Import Programs, Department of Commerce, Washington, D.C.

Docket No. 71-00541-33-46500. Applicant: Michigan State University, 516 Biochemistry, MSU, East Lansing, Mich. 48823. Article: Ultramicrotome, Model LKB 8800A. Manufacturer: LKB Produkter A.B., Sweden.

Intended use of article: The article will be used for research to determine the reaction of the postnatal mouse cerebellum to injury by an alkylating agent with coordinated ultrastructural and biochemical studies at various post-injection intervals. These coordinated studies will be conducted on both whole tissue and fraction preparations from the cerebellum.

Comments: No comments have been received with respect to this application.

Decision: Application approved. No instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, is being manufactured in the United States.

Reasons: Examination of the applicant's thin sections under the electron microscope will provide optimal information when such sections are uniform in thickness and have smoothly cut surfaces. Conditions for obtaining high quality sections depend to a large extent

on the properties of the specimen being sectioned (e.g., hardness, consistency, toughness, etc.), the properties of the embedding media and the geometry of the block. In connection with a prior case (Docket No. 69-00665-33-46500) which relates to the duty-free entry of an identical foreign article, the Department of Health, Education, and Welfare (HEW) advised that "Smooth cuts are obtained when the speed of cutting (among such [other] factors as knife edge condition and angle), is adjusted to the characteristics of the material being sectioned. The range of cutting speeds and a capability for the higher cutting speeds is, therefore, a pertinent characteristic of the ultramicrotome to be used for sectioning materials that experience has shown difficult to section."

In connection with another prior case (Docket No. 70-00077-33-46500) relating to the duty-free entry of an identical foreign article, HEW advised that "ultrathin sectioning of a variety of tissues having a wide range in density, hardness, etc." requires a maximum range in cutting speed and, further, that "The production of ultrathin serial sections of specimens that have great variation in physical properties is very difficult." The foreign article has a cutting speed range of 0.1 to 20 millimeters/second (mm./sec.). The most closely comparable domestic instrument is the Model MT-2B ultramicrotome manufactured by Ivan Sorvall, Inc. (Sorvall). The Sorvall Model MT-2B ultramicrotome has a cutting speed range of 0.09 to 3.2 mm./sec.

We are advised by HEW in its memorandum of September 10, 1971, that cutting speeds in excess of 4 mm./sec. are pertinent to the satisfactory serial sectioning of the softer specimens encountered in the applicant's studies involving injury to the developing mouse cerebellum at the ultrastructural level. HEW cites as a precedent its prior recommendation relating to Docket No. 71-00322-33-46500 which conforms in many particulars to the captioned application.

We, therefore, find that the Model MT-2B ultramicrotome is not of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used.

The Department of Commerce knows of no other instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, which is being manufactured in the United States.

SETH M. BODNER,

Director,

Office of Import Programs.

[FR Doc.71-17188 Filed 11-24-71;8:47 am]

STATE UNIVERSITY OF NEW YORK AT ALBANY

Notice of Decision on Application for Duty-Free Entry of Scientific Article

The following is a decision on an application for duty-free entry of a scientific article pursuant to section 6(c) of the Educational, Scientific, and Cultural

Materials Importation Act of 1966 (Public Law 89-651, 80 Stat. 897) and the regulations issued thereunder as amended (34 F.R. 15787 et seq.).

A copy of the record pertaining to this decision is available for public review during ordinary business hours of the Department of Commerce, at the Office of Import Programs, Department of Commerce, Washington, D.C.

Docket No. 71-00436-02-37100. Applicant: State University of New York at Albany, 1400 Washington Avenue, Albany, NY 12203. Article: Model 07499.02 dangoumau sample homogenizer. Capacity: two 65-milliliter jars or one 150-milliliter jar. Ball-mill agitation by a 220-volt, 50-cycle, $\frac{1}{10}$ -horsepower asynchronous motor. Has water jacket for maintaining constant temperature of the sample during pulverization. Manufacturer: Prolabo, Societe, Paris, France.

Intended use of article: The article will be used for low temperature pulverization of plant material, preliminary to extraction of chemical constituents, principally seeds preceding protein extraction.

Comments: No comments have been received with respect to this application.

Decision: Application approved. No instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, is being manufactured in the United States.

Reasons: The foreign article provides the combination of small sample size, temperature control, operation at low temperatures, and a reciprocating action which forces a ball to pulverize the sample. The characteristics described above are pertinent to the applicant's research studies. We are advised by the Department of Health, Education, and Welfare (HEW) in its memorandum dated July 9, 1971, that it knows of no domestic instrument or apparatus that provides all the capabilities of the foreign article.

The Department of Commerce knows of no other instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, which is being manufactured in the United States.

SETH M. BODNER,
Director,
Office of Import Programs.

[FR Doc. 71-17189 Filed 11-24-71; 8:47 am]

ROCKEFELLER UNIVERSITY

Notice of Decision on Application for Duty-Free Entry of Scientific Article

The following is a decision on an application for duty-free entry of a scientific article pursuant to section 6(c) of the Educational, Scientific, and Cultural Materials Importation Act of 1966 (Public Law 89-651, 80 Stat. 897) and the regulations issued thereunder as amended (34 F.R. 15787 et seq.).

A copy of the record pertaining to this decision is available for public review during ordinary business hours of the

Department of Commerce, at the Office of Import Programs, Department of Commerce, Washington, D.C.

Docket No. 71-00239-33-46040. Applicant: The Rockefeller University, 66th and York Avenue, New York, NY 10021. Article: Electron microscope, Model EM 300. Manufacturer: Philips Electron NVD, The Netherlands.

Intended use of article: The article will be used in the Department of Parasitology and Invertebrate Physiology for high resolution studies in host-parasite relationship of intracellular parasites such as malaria, *Babesia* and *Leishmania* as well as for the study of structures involved in the complex feeding mechanism of the protozoan *Tokophrya jejunum*.

Comments: No comments have been received with respect to this application.

Decision: Application approved. No instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, is being manufactured in the United States.

Reasons: The foreign article provides both a 20-kilovolt accelerating voltage and an externally controlled anode-cathode spacing. The most closely comparable domestic instrument is the Model EMU-4C manufactured by Forgflo Corp. (Forgflo). The Model EMU-4C provides upon request a 20-kilovolt accelerating voltage but not an externally controlled anode-cathode spacing. We are advised by the Department of Health, Education, and Welfare in its memorandum dated February 21, 1971, that both the 20-kilovolt accelerating voltage and an externally controlled anode-cathode spacing are pertinent to the purposes for which the foreign article is intended to be used.

We, therefore, find that the Model EMU-4C is not of equivalent scientific value to the foreign article for such purposes as the article is intended to be used.

The Department of Commerce knows of no other instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, which is being manufactured in the United States.

SETH M. BODNER,
Director,
Office of Import Programs.

[FR Doc. 71-17190 Filed 11-24-71; 8:47 am]

UNIVERSITY OF CALIFORNIA

Notice of Decision on Application for Duty-Free Entry of Scientific Article

The following is a decision on an application for duty-free entry of a scientific article pursuant to section 6(c) of the Educational, Scientific, and Cultural Materials Importation Act of 1966 (Public Law 89-651, 80 Stat. 897) and the regulations issued thereunder as amended (34 F.R. 15787 et seq.).

A copy of the record pertaining to this decision is available for public review

during ordinary business hours of the Department of Commerce, at the Office of Import Programs, Department of Commerce, Washington, D.C.

Docket No. 71-00573-33-46500. Applicant: University of California, Radiobiology Laboratory, Davis, Calif. 95616. Article: Ultramicrotome, Model LKB 8800A, and accessories. Manufacturer: LKB Produkter A.B., Sweden.

Intended use of article: The article will be used in studies concerning mineralized tissue including compact and trabecular bone both lamellar and woven in pattern; osteosarcomas; cartilage; bone marrow; and also other soft tissues of the canine. Undergraduate and graduate veterinarians will be trained in morphologic understanding of disease processes in courses in pathology and tumor biology.

Comments: No comments have been received with respect to this application.

Decision: Application approved. No instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as the article is intended to be used, is being manufactured in the United States.

Reasons: Examination of the applicant's thin sections under the electron microscope will provide optimal information when such sections are uniform in thickness and have smoothly cut surfaces. Conditions for obtaining high quality sections depend to a large extent on the properties of the specimen being sectioned (e.g., hardness, consistency, toughness, etc.), the properties of the embedding media and the geometry of the block. In connection with a prior case (Docket No. 69-00665-33-46500) which relates to the duty-free entry of an identical foreign article, the Department of Health, Education, and Welfare (HEW) advised that "Smooth cuts are obtained when the speed of cutting (among such [other] factors as knife edge condition and angle), is adjusted to the characteristics of the material being sectioned. The range of cutting speeds and a capability for the higher cutting speeds is, therefore, a pertinent characteristic of the ultra microtome to be used for sectioning materials that experience has shown difficult to section."

In connection with another prior case (Docket No. 70-00077-33-46500) relating to the duty-free entry of an identical foreign article, HEW advised that "ultrathin sectioning of a variety of tissues having a wide range in density, hardness, etc." requires a maximum range in cutting speed and, further, that "The production of ultrathin serial sections of specimens that have great variation in physical properties is very difficult." The foreign article has a cutting speed range of 0.1 to 20 millimeters/second (mm./sec.). The most closely comparable domestic instrument is the Model MT-2B ultramicrotome manufactured by Ivan Sorvall, Inc. (Sorvall). The Sorvall Model MT-2B ultramicrotome has a cutting speed range of 0.09 to 3.2 mm./sec.

We are advised by HEW in its memorandum of October 1, 1971, that cutting

speeds in excess of 4 mm./sec. are pertinent to the sectioning of the softer specimens or the more complex tissue structures encountered in the applicant's studies of foci of radiation damage and cell repair which involves ultrathin serial sectioning of a variety of marrow, bone and related tissue, and tumor. HEW cites as a precedent its prior recommendation relating to Docket No. 71-00322-33-46500 which conforms in many particulars to the captioned application.

We, therefore, find that the Model MT-2B ultramicrotome is not of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used.

The Department of Commerce knows of no other instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, which is being manufactured in the United States.

SETH M. BODNER,
Director,
Office of Import Programs.

[FR Doc.71-17191 Filed 11-24-71;8:47 am]

UNIVERSITY OF CALIFORNIA

Notice of Decision on Application for Duty-Free Entry of Scientific Article

The following is a decision on an application for duty-free entry of a scientific article pursuant to section 6(c) of the Educational, Scientific, and Cultural Materials Importation Act of 1966 (Public Law 89-651, 80 Stat. 897) and the regulations issued thereunder as amended (34 F.R. 15787 et seq.).

A copy of the record pertaining to this decision is available for public review during ordinary business hours of the Department of Commerce, at the Office of Import Programs, Department of Commerce, Washington, D.C.

Docket No. 71-00337-33-21095. Applicant: University of California, San Francisco, Purchasing Department, 1438 South 10th Street, Richmond, CA 94804. Article: Dichrograph, Model CD 185. Manufacturer: Jouan, France.

Intended use of article: The article will be used in pharmaceutical chemistry courses and for research to determine the configuration of a wide range of biologically active substances, including synthetic drugs, steroids, amino acids, natural alkaloids, phospholipids, peptides, and proteins over the wavelength range from 185 to 615 nm., and for carrying out conformational studies in solution on these substances.

Comments: No comments have been received with respect to this application.

Decision: Application approved. No instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, is being manufactured in the United States.

Reasons: The foreign article is capable of measuring samples in the temperature range of -180° centigrade to $+40^{\circ}$ centigrade regulated to $\pm 0.5^{\circ}$ C. We are advised by the Department of Health,

Education, and Welfare (HEW) in its memorandum dated May 14, 1971, that the capability described above is pertinent to the purposes for which the article is intended to be used. HEW further advises that it knows of no comparable domestic instrument or apparatus being manufactured in the United States that can be used for all the applicant's purposes.

The Department of Commerce knows of no other instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, which is being manufactured in the United States.

SETH M. BODNER,
Director,
Office of Import Programs.

[FR Doc.71-17192 Filed 11-24-71;8:47 am]

UNIVERSITY OF CONNECTICUT

Notice of Decision on Application for Duty-Free Entry of Scientific Article

The following is a decision on an application for duty-free entry of a scientific article pursuant to section 6(c) of the Educational, Scientific, and Cultural Materials Importation Act of 1966 (Public Law 89-651, 80 Stat. 897) and the regulations issued thereunder as amended (34 F.R. 15787 et seq.).

A copy of the record pertaining to this decision is available for public review during ordinary business hours of the Department of Commerce, at the Office of Import Programs, Department of Commerce, Washington, D.C.

Docket No. 71-00479-33-46500. Applicant: The University of Connecticut, Storrs, Conn. 06268. Article: Ultramicrotome, Model LKB 8800A. Manufacturer: LKB Produkter A.B., Sweden.

Intended use of article: The article will be used for studies of unicellular algae, endocrine glands of fish, cutaneous receptor organs of fish, oviducts of birds, electric organs of electric eels, cell membranes of micro-organisms, plant viruses, bacterial viruses, and nerve sheaths. Research concerns the structures of normal materials and experimentally treated materials.

Comments: No comments have been received with respect to this application.

Decision: Application approved. No instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, is being manufactured in the United States.

Reasons: Examination of the applicant's thin sections under the electron microscope will provide optimal information when such sections are uniform in thickness and have smoothly cut surfaces. Conditions for obtaining high quality sections depend to a large extent on the properties of the specimen being sectioned (e.g., hardness, consistency, toughness, etc.), the properties of the embedding media and the geometry of the block. In connection with a prior case (Docket No. 69-00665-33-46500) which relates to the duty-free entry of

an identical foreign article, the Department of Health, Education, and Welfare (HEW) advised that "Smooth cuts are obtained when the speed of cutting (among such [other] factors as knife edge condition and angle), is adjusted to the characteristics of the material being sectioned. The range of cutting speeds and a capability for the higher cutting speeds is, therefore, a pertinent characteristic of the ultra microtome to be used for sectioning materials that experience has shown difficult to section."

In connection with another prior case (Docket No. 70-00077-33-46500) relating to the duty-free entry of an identical foreign article, HEW advised that "ultrathin sectioning of a variety of tissues having a wide range in density, hardness, etc." requires a maximum range in cutting speed and, further, that "The production of ultrathin serial sections of specimens that have great variation in physical properties is very difficult." The foreign article has a cutting speed range of 0.1 to 20 millimeters/second (mm./sec.). The most closely comparable domestic instrument is the Model MT-2B ultramicrotome manufactured by Ivan Sorvall, Inc. (Sorvall). The Sorvall Model MT-2B ultramicrotome has a cutting speed range of 0.09 to 3.2 mm./sec.

We are advised by HEW in its memorandum of August 20, 1971 that cutting speeds in excess of 4 mm./sec. are pertinent to the applicants intended use which includes study of ultrastructures and localization of a variety of biological materials including cell membranes, nerve sheaths, glands, and enzymes. HEW cites as a precedent its prior recommendation relating to Docket No. 71-00138-33-46500 which conforms in many particulars to the captioned application.

We, therefore, find that the Model MT-2B ultramicrotome is not of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used.

The Department of Commerce knows of no other instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, which is being manufactured in the United States.

SETH M. BODNER,
Director,
Office of Import Programs.

[FR Doc.71-17193 Filed 11-24-71;8:47 am]

UNIVERSITY OF FLORIDA

Notice of Decision on Application for Duty-Free Entry of Scientific Article

The following is a decision on an application for duty-free entry of a scientific article pursuant to section 6(c) of the Educational, Scientific, and Cultural Materials Importation Act of 1966 (Public Law 89-651, 80 Stat. 897) and the regulations issued thereunder as amended (34 F.R. 15787 et seq.).

A copy of the record pertaining to this decision is available for public review during ordinary business hours of the Department of Commerce, at the Office

of Import Programs, Department of Commerce, Washington, D.C.

Docket No. 70-00765-65-46070. Applicant: University of Florida, Department of Metallurgical and Materials Engineering, Gainesville, Fla. 32601. Article: Scanning electron microscope, Model Mark IIA. Manufacturer: Cambridge Instrument Co., Ltd., United Kingdom.

Intended use of article: The article will be used for educational and research purposes. Metallurgical and materials engineering studies concern the morphology of reaction of product surfaces from aqueous and high temperature corrosion and oxidation reactions and the fracture surfaces of metals, ceramics, composite structure, and fibers. Life sciences studies include cell wall surfaces in Streptococci; plant tissues; bone structures, tissues of humans and other mammals, and micro-paleontology.

Comments: No comments have been received with respect to this application.

Decision: Application approved. No instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, was being manufactured in the United States at the time the foreign article was ordered (June 18, 1969).

Reasons: The application is a resubmission of Docket No. 69-00681-65-46070 which was denied without prejudice to resubmission for informational deficiencies. The foreign article provides an airlock between the gun and column, three prealigned electromagnetic condenser lens system which provides automatic compensation for the accelerating voltages ranges and full 360° rotation of the specimen in the goniometer stage. The most closely comparable domestic instruments available at the time the foreign article was ordered was the Model SM-2 manufactured by the Ultrascan Corporation which was formerly doing business as the K-Square Corporation and the Model 700 manufactured by the Materials Analysis Corp. (MAC). Both the Model SM-2 and MAC 700 could provide the required goniometer stage and the MAC 700 could provide three prealigned electromagnetic condenser lens but neither could provide an airlock between the gun and column. We are advised by the National Bureau of Standards (NBS) in its memorandum dated April 7, 1971, that all of the characteristics of the foreign article described above are pertinent to the purposes for which the article is intended to be used.

For the foregoing reasons, we find that neither the Model SM-2 nor the Model 700 is of equivalent scientific value to the foreign article for such purposes as this article is intended to be used.

The Department of Commerce knows of no other instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, which is being manufactured in the United States at the time the foreign article was ordered.

SETH M. BODNER,
Director,

Office of Import Programs.

[FR Doc.71-17194 Filed 11-24-71; 8:47 am]

UNIVERSITY OF IOWA

Notice of Decision on Application for Duty-Free Entry of Scientific Article

The following is a decision on an application for duty-free entry of a scientific article pursuant to section 6(c) of the Educational, Scientific, and Cultural Materials Importation Act of 1966 (Public Law 89-651, 80 Stat. 897) and the regulations issued thereunder as amended (34 F.R. 15787 et seq.).

A copy of the record pertaining to this decision is available for public review during ordinary business hours of the Department of Commerce, at the Office of Import Programs, Department of Commerce, Washington, D.C.

Docket No. 71-00336-33-28500. Applicant: University of Iowa, Biochemistry Department, Medical Research Center, Iowa City, Iowa 52240. Article: Electrophoresis Equipment. Manufacturer: Locarte Co., United Kingdom.

Intended use of article: The article will be used to study the migration of large and small aggregates of charged molecules under the influence of an electrical field which is applied to a medium in which the molecules are suspended. Amino acids, peptides from enzyme digestions, proteins, nucleic acids, viruses, and colloidal particles of biological importance that carry charges will be separated. Also, the article will be used in four biochemistry courses for the training of students of pharmacy, dentistry, and chemistry.

Comments: No comments have been received with respect to this application.

Decision: Application approved. No instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, is being manufactured in the United States.

Reasons: The foreign article provides five interlocking safety devices and cooling in two plates permitting separation at higher voltages with improved resolution. The most closely comparable domestic instrument is the Model FP-22H manufactured by Savant Industries Inc. The Model FP-22H provides one interlocking safety switch and cooling in one plate permitting separations at higher voltages but with reduced resolution. We are advised by the Department of Health, Education, and Welfare in its memorandum dated May 14, 1971, that the capabilities of better resolution and maximum safety are pertinent to the purposes for which the foreign article is intended to be used. We, therefore, find that the Model FP-22H is not of equivalent scientific value to the foreign article, for such purposes as the article is intended to be used.

The Department of Commerce knows of no other instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, which is being manufactured in the United States.

SETH M. BODNER,
Director,

Office of Import Programs.

[FR Doc.71-17198 Filed 11-24-71; 8:48 am]

UNIVERSITY OF LOUISVILLE

Notice of Decision on Application for Duty-Free Entry of Scientific Article

The following is a decision on an application for duty-free entry of a scientific article pursuant to section 6(c) of the Educational, Scientific, and Cultural Materials Importation Act of 1966 (Public Law 89-651, 80 Stat. 897) and the regulations issued thereunder as amended (34 F.R. 15787 et seq.).

A copy of the record pertaining to this decision is available for public review during ordinary business hours of the Department of Commerce, at the Office of Import Programs, Department of Commerce, Washington, D.C.

Docket No. 71-00515-33-46040. Applicant: University of Louisville, School of Medicine, Health Sciences Center, 500 South Preston Street, Louisville, KY 40200. Article: Electron microscope, Model EM 9S-2. Manufacturer: Carl Zeiss, Inc., West Germany.

Intended use of article: The article will be used for an ultrastructural investigation of animal tissues from hormone deficient animals. Diabetic rats, dogs, rabbits, and monkeys will be treated with a variety of drugs for studies on the site of action of insulin and prostaglandins on the subcellular elements of the animal tissues. Educational use will be in a course in "Selected Topics in Molecular Endocrinology" which has approximately 25 students per semester.

Comments: No comments have been received with respect to this application.

Decision: Application approved. No instrument or apparatus of equivalent scientific value to the foreign article for such purposes as this article is intended to be used, is being manufactured in the United States.

Reasons: The applicant requires an electron microscope which is suitable for instruction in the basic principles of electron microscopy. The foreign article is a relatively simple, medium resolution electron microscope designed for confident use by beginning students with a minimum of detailed programming. The most closely comparable domestic instrument is the Model EMU-4C electron microscope manufactured by the Forgflo Corp. The Model EMU-4C electron microscope is a relatively complex instrument designed for research, which requires a skilled electron microscopist for its operation. We are advised by the Department of Health, Education, and Welfare in its memorandum dated July 23, 1971, that the relative simplicity of design and ease of operation of the foreign article is pertinent to the applicant's educational purposes.

We, therefore, find that the Model EMU-4C electron microscope is not of equivalent scientific value to the foreign article for such purposes as this article is intended to be used.

The Department of Commerce knows of no other instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article

is intended to be used, which is being manufactured in the United States.

SETH M. BODNER,
Director,
Office of Import Programs.

[FR Doc.71-17196 Filed 11-24-71;8:48 am]

UNIVERSITY OF MARYLAND

Notice of Decision on Application for Duty-Free Entry of Scientific Article

The following is a decision on an application for duty-free entry of a scientific article pursuant to section 6(c) of the Educational, Scientific, and Cultural Materials Importation Act of 1966 (Public Law 89-651, 80 Stat. 897) and the regulations issued thereunder as amended (34 F.R. 15787 et seq.).

A copy of the record pertaining to this decision is available for public review during ordinary business hours of the Department of Commerce, at the Office of Import Programs, Department of Commerce, Washington, D.C.

Docket No. 71-00352-33-46040. Applicant: University of Maryland, Baltimore County, 5401 Wilkins Avenue, Baltimore, MD 21228. Article: Electron microscope, Model HU-12. Manufacturer: Hitachi, Ltd., Japan.

Intended use of article: The article will be used for research on ultrastructural aspects of nuclear development in ciliated protozoa and on production of surface membrane in the same organisms. Advanced undergraduate and graduate students will be trained in the basics of electron microscopic techniques and applications.

Comments: No comments have been received with respect to this application.

Decision: Application approved. No instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, is being manufactured in the United States.

Reasons: The foreign article has a specified resolving capability of 3 angstroms. The most closely comparable domestic instrument is the Model EMU-4C electron microscope manufactured by the Forjflo Corp. The Model EMU-4C has a specified resolving capability of 5 angstroms. (The lower the numerical rating in terms of angstrom units, the better the resolving capability.) We are advised by the Department of Health, Education, and Welfare in its memorandum dated June 30, 1971, that the additional resolving capability of the foreign article is pertinent to the purposes for which the foreign article is intended to be used.

We, therefore, find that the Model EMU-4c is not of equivalent scientific value to the foreign article for such purposes as the article is intended to be used.

The Department of Commerce knows of no other instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article

is intended to be used, which is being manufactured in the United States.

SETH M. BODNER,
Director,
Office of Import Programs.

[FR Doc.71-17197 Filed 11-24-71;8:48 am]

UNIVERSITY OF PITTSBURGH

Notice of Decision on Application for Duty-Free Entry of Scientific Article

The following is a decision on an application for duty-free entry of a scientific article pursuant to section 6(c) of the Educational, Scientific, and Cultural Materials Importation Act of 1966 (Public Law 89-651, 80 Stat. 897) and the regulations issued thereunder as amended (34 F.R. 15787 et seq.).

A copy of the record pertaining to this decision is available for public review during ordinary business hours of the Department of Commerce, at the Office of Import Programs, Department of Commerce, Washington, D.C.

Docket No. 71-00588-00-11000. Applicant: University of Pittsburgh, Department of Chemistry, 4200 Fifth Avenue, Pittsburgh, PA 15212. Article: LKB 9010 mass marker and LKB 9043 heated inlet. Manufacturer: LKB Produkter A.B., Sweden.

Intended use of article: The articles are accessories for an existing LKB 9000 gas chromatograph-mass spectrometer.

Comments: No comments have been received with respect to this application.

Decision: Application approved. No instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, is being manufactured in the United States.

Reasons: The application relates to accessories for an instrument that had been previously imported for the use of the applicant institution. The article is being furnished by the manufacturer which produced the instrument with which the article is intended to be used.

The Department of Commerce knows of no similar accessories being manufactured in the United States, which is interchangeable with or can be readily adapted to the instrument with which the foreign article is intended to be used.

SETH M. BODNER,
Director,
Office of Import Programs.

[FR Doc.71-17199 Filed 11-24-71;8:48 am]

WESTERN MICHIGAN UNIVERSITY

Notice of Decision on Application for Duty-Free Entry of Scientific Article

The following is a decision on an application for duty-free entry of a scientific article pursuant to section 6(c) of the Educational, Scientific, and Cultural Materials Importation Act of 1966 (Public Law 89-651, 80 Stat. 897) and the regulations issued thereunder as amended (34 F.R. 15787 et seq.).

A copy of the record pertaining to this decision is available for public review during ordinary business hours of the Department of Commerce, at the Office of Import Programs, Department of Commerce, Washington, D.C.

Docket No. 71-00553-33-46500. Applicant: Western Michigan University, Department of Biology, Wood Hall, Western Michigan Avenue, Kalamazoo, MI 49001. Article: Ultramicrotome, Model LKB 8800A. Manufacturer: LKB Produkter A.B., Sweden.

Intended use of article: The article will be used to examine plant, animal and bacterial tissues, exhibiting normal and pathological alterations. The studies concern ultrastructural changes associated with viral infection, primarily as regards antigenic changes at the various membranes; and maturation of animal viruses at cell membranes resulting in antigenic alterations in both lytic and nonlytic conditions.

Comments: No comments have been received with respect to this application.

Decision: Application approved. No instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, is being manufactured in the United States.

Reasons: Examination of the applicant's thin sections under the electron microscope will provide optimal information when such sections are uniform in thickness and have smoothly cut surfaces. Conditions for obtaining high quality sections depend to a large extent on the properties of the specimen being sectioned (e.g., hardness, consistency, toughness, etc.), the properties of the embedding media and the geometry of the block. In connection with a prior case (Docket No. 69-00665-33-46500) which relates to the duty-free entry of an identical foreign article, the Department of Health, Education, and Welfare (HEW) advised that "Smooth cuts are obtained when the speed of cutting (among such [other] factors as knife edge condition and angle), is adjusted to the characteristics of the material being sectioned. The range of cutting speeds and a capability for the higher cutting speeds is, therefore, a pertinent characteristic of the ultra microtome to be used for sectioning materials that experience has shown difficult to section."

In connection with another prior case (Docket No. 70-00077-33-46500) relating to the duty-free entry of an identical foreign article, HEW advised that "ultra-thin sectioning of a variety of tissues having a wide range in density, hardness etc." requires a maximum range in cutting speed and, further, that "The production of ultrathin serial sections of specimens that have great variation in physical properties is very difficult." The foreign article has a cutting speed range of 0.1 to 20 millimeters/second (mm./sec.). The most closely comparable domestic instrument is the Model MT-2B ultramicrotome manufactured by Ivan Sorvall, Inc. (Sorvall). The Sorvall

Model MT-2B ultramicrotome has a cutting speed range of 0.09 to 3.2 mm./sec.

We are advised by HEW in its memorandum of September 10, 1971, that cutting speeds in excess of 4 mm./sec. are pertinent to the sectioning of the softer specimens encountered in the applicant's studies involving antigenic change in a variety of cell types at the various membranes due to viral infection. HEW cites as a precedent its prior recommendation relating to Docket No. 71-00307-33-46500 which conforms in many particulars to the captioned application.

We, therefore, find that the Model MT-2B ultramicrotome is not of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used.

The Department of Commerce knows of no other instrument or apparatus of equivalent scientific value to the foreign article, for such purposes as this article is intended to be used, which is being manufactured in the United States.

SETH M. BODNER,
Director,

Office of Import Programs.

[FR Doc.71-17200 Filed 11-24-71;8:48 am]

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

Food and Drug Administration
BORDEN, INC.

Notice of Withdrawal of Petition for Food Additives

Pursuant to provisions of the Federal Food, Drug, and Cosmetic Act (sec. 409 (b), 72 Stat. 1786; 21 U.S.C. 348(b)), the following notice is issued:

In accordance with § 121.52 *Withdrawal of petitions without prejudice* of the procedural food additive regulations (21 CFR 121.52), Borden, Inc., 650 Madison Avenue, New York, N.Y. 10017, has withdrawn its petition (FAP 1A2674), notice of which was published in the FEDERAL REGISTER of May 13, 1971 (36 F.R. 8820), proposing the issuance of a regulation (21 CFR Part 121) to provide for the safe use of glycine as a flavor agent in flavoring compounds.

Dated: November 18, 1971.

VIRGIL O. WODICKA,
Director, Bureau of Foods.

[FR Doc.71-17218 Filed 11-24-71;8:56 am]

EASTMAN CHEMICAL PRODUCTS,
INC.

Notice of Filing of Petition for Food Additive

Pursuant to provisions of the Federal Food, Drug, and Cosmetic Act (sec. 409(b)(5), 72 Stat. 1786; 21 U.S.C. 348(b)(5)), notice is given that a petition (FAP 1A2588) has been filed by

Eastman Chemical Products, Inc., Kingsport, Tenn. 37662, proposing the issuance of a food additive regulation (21 CFR Part 121) to provide for the safe use of TBHQ (tertiary butylhydroquinone) alone or in combination with other permitted antioxidants in food whereby the total antioxidant content of the food does not exceed 0.02 percent of its oil or fat content including its essential (volatile) oil content.

Dated: November 17, 1971.

VIRGIL O. WODICKA,
Director, Bureau of Foods.

[FR Doc.71-17219 Filed 11-24-71;8:56 am]

ECONOMICS LABORATORY, INC.

Notice of Filing of Petition for Food Additive

Pursuant to provisions of the Federal Food, Drug, and Cosmetic Act (sec. 409(b)(5), 72 Stat. 1786; 21 U.S.C. 348(b)(5)), notice is given that a petition (FAP 2H2741) has been filed by Economics Laboratory, Inc., Osborn Building, St. Paul, Minn. 55102, proposing that § 121.2547 *Sanitizing solutions* be amended to provide for the safe use of an aqueous solution containing iodine, butoxy monoether of mixed (ethylene-propylene) polyalkylene glycol, having a cloud point of 90°-100° C. in 0.5 percent aqueous solution and an average molecular weight of 3300, polyoxyethylene-polyoxypropylene block polymers (having a minimum average molecular weight of 2,000), together with components generally recognized as safe, for use on food-processing equipment and utensils, bottles and other containers.

Dated: November 12, 1971.

VIRGIL O. WODICKA,
Director, Bureau of Foods.

[FR Doc.71-17220 Filed 11-24-71;8:56 am]

TILLIE LEWIS FOODS, INC.

Canned Apricots Deviating From Identity Standards; Temporary Permit for Market Testing

Pursuant to § 10.5 (21 CFR 10.5) concerning temporary permits to facilitate market testing of foods deviating from the requirements of standards of identity promulgated pursuant to section 401 (21 U.S.C. 341) of the Federal Food, Drug, and Cosmetic Act, notice is given that a temporary permit has been issued to Tillie Lewis Foods, Inc., Stockton, Calif. 95201. This permit covers limited interstate marketing tests of canned apricots that deviate from the identity standard prescribed in § 27.10 (21 CFR 27.10) in that ascorbic acid will be added in an amount necessary to preserve color.

The principal display panel of the label on each container will bear the statement "ascorbic acid added to preserve color" as part of the name of the product.

This permit expires 12 months from the date of signature of this document.

Dated: November 17, 1971.

SAM D. FINE,
Associate Commissioner
for Compliance.

[FR Doc.71-17221 Filed 11-24-71;8:57 am]

Office of Education

BUREAU OF EDUCATION FOR THE
HANDICAPPED

Notice of Closing Date for Receipt of Applications

Pursuant to the authority contained in sections 631 and 634 of the Education of the Handicapped Act (84 Stat. 175, 184, 185, 20 U.S.C. 1431, 1434), notice is hereby given that the U.S. Commissioner of Education has established a final closing date for receipt of applications for training grants (except Special Projects) under Part D of the Act by institutions of higher education. Such applications must be postmarked on or before the 30th day following the publication of this notice in the FEDERAL REGISTER.

Regulations governing such grants and other programs and projects authorized under Part D of the Act are being developed, and will be published in the FEDERAL REGISTER as notice of proposed rule making, subject to public comment, as soon as they have been completed.

Dated: November 17, 1971.

S. P. MARLAND, JR.,
U.S. Commissioner of Education.

[FR Doc.71-17245 Filed 11-24-71;8:54 am]

Public Health Service

MINORITY SCHOOLS BIOMEDICAL
SUPPORT PROGRAM

Notices of Initiation of Program

Pursuant to authority of section 301 (d) of the PHS Act, as amended (42 U.S.C. 241(d)) the Director, National Institutes of Health announces the initiation of a new grant program called the Minority Schools Biomedical Support (MSBS) Program to be administered by the General Research Support Branch, Division of Research Resources, National Institutes of Health.

The MSBS Program is designed to strengthen the institutional biomedical research and research training capabilities of public and private nonprofit 4-year colleges, universities, and health professional schools, within the United States and its territories, in which student enrollments are drawn mainly from ethnic minority groups (such as blacks, browns, reds, and orientals).

This program is oriented toward providing institutional support for biomedical research and research training rather than support of individual categorical research projects. Funds awarded under this program may be used for a broad range of biomedically oriented

purposes including the support of faculty "released time," biomedical research programs, salaries of research personnel including undergraduate and graduate students as research or laboratory assistants, research training programs, undergraduate, graduate, and postgraduate research trainees, research resources, and consortia biomedical programs.

Awards under this program will range from approximately \$30,000 to \$500,000 per year for a period of support of as much as 5 years. Applicant institutions will compete for available funds at three levels of activity. Smaller awards could enable institutions to support the activities of a few faculty members involved in individual research or research training activities. At the intermediate level, the institutions could extend and expand the biomedical activities of one or more departments (e.g., biology, chemistry, psychology, etc.). With the larger awards, institutions could make long-range commitments for the general expansion of their overall biomedical research capabilities through the involvement of sizeable faculty groups.

Effective December 1, 1971, application kits and instructions will be available from the Minority Schools Biomedical Support Program, General Research Support Branch, Division of Research Resources, National Institutes of Health, Building 31, Room 4B04, Bethesda, Md. 20014, telephone Area Code 301, 496-6743.

Dated: November 18, 1971.

ROBERT Q. MARSTON,
Director,
National Institutes of Health.

[FR Doc.71-17206 Filed 11-24-71;8:51 am]

ATOMIC ENERGY COMMISSION

[Docket No. 50-394]

CALIFORNIA STATE POLYTECHNIC COLLEGE

Notice of Proposed Issuance of Construction Permit

The Atomic Energy Commission (the Commission) is considering the issuance of a construction permit to the California State Polytechnic College (the College) at San Luis Obispo, Calif. The proposed permit would authorize the College to receive, possess, transport, and construct the AGN-201 (Serial No. 100) nuclear research reactor on its campus in San Luis Obispo, Calif., for educational training. The permit would also authorize the receipt, possession, transportation, and storage of 735 grams of contained uranium-235 and the small quantity of byproduct material contained in the reactor components. The reactor is presently located in Monterey, Calif., under the authority of Commission License No. R-11 issued to the U.S. Naval Postgraduate School (Docket No. 50-43).

The Commission has found that the application dated May 30, 1971, and supplements thereto dated July 26 and October 22, 1971, comply with the requirements of the Atomic Energy Act of

1954, as amended (hereinafter, "the Act"), and the Commission's regulations published in 10 CFR Chapter I. Prior to issuance of the proposed construction permit, the Commission will have made the remainder of the findings required by the Act and the Commission's regulations which are set forth in the proposed permit. Upon issuance of the permit, California State Polytechnic College will be required to execute an indemnity agreement as required by section 170 of the Act and 10 CFR Part 140 of the Commission's regulations.

Within 15 days from the date of publication of this notice in the FEDERAL REGISTER, the applicant may file a request for a hearing and any person whose interest may be affected by this proceeding may file a petition for leave to intervene. Requests for a hearing and petitions to intervene shall be filed in accordance with the Commission's rules of practice in 10 CFR Part 2. If a request for a hearing or a petition for leave to intervene is filed within the time prescribed in this notice, the Commission will issue a notice of hearing or an appropriate order.

For further details with respect to this proposed construction permit, see (1) the application by the College dated May 30, 1971, and supplements thereto dated July 26 and October 22, 1971, (2) the proposed construction permit, and (3) a related Safety Evaluation prepared by the Division of Reactor Licensing, all of which are available for public inspection at the Commission's Public Document Room at 1717 H Street NW., Washington, DC. A copy of each of items (2) and (3) may be obtained upon request sent to the U.S. Atomic Energy Commission, Washington, D.C. 20545, Attention: Director, Division of Reactor Licensing.

Dated at Bethesda, Md., this 17th day of November 1971.

For the Atomic Energy Commission,

DONALD J. SKOVHOLT,
Assistant Director for Reactor Operations, Division of Reactor Licensing.

[FR Doc.71-17216 Filed 11-24-71;8:49 am]

[Docket No. 50-271]

VERMONT YANKEE NUCLEAR POWER CORP.

Order Setting Evidentiary Hearing

In the matter of Vermont Yankee Nuclear Power Corp. (Vermont Yankee Nuclear Power Stations), Docket No. 50-271.

The Atomic Safety and Licensing Board has been considering the advisability of reconvening the next session of hearings in this proceeding at 9 a.m. on Wednesday, December 1, 1971, rather than pursuant to the present schedule of 2 p.m. on November 29. Upon inquiry, the Board has determined that it will be convenient to all of the parties and their attorneys, except Applicant and the Staff to reconvene on December 1, 1971. Applicant and the Staff, in their

separate replies, have urged adherence to the present schedule which contemplated a 1 week session. The Board concludes that by extending the hours of the daily hearings to include evening sessions, the same 1 week's regular schedule of hearing time can be provided for the parties and that no prejudice nor delay will occur by reason of this change in schedule.

Wherefore, it is ordered, In accordance with the Atomic Energy Act, as amended, and the rules of practice of the Commission, that the schedule to convene an evidentiary hearing in this proceeding on November 29, 1971 is canceled and the next session of evidentiary hearing in this proceeding shall convene at 9 a.m. on Wednesday, December 1, 1971, in the Vermont National Guard Armory, 207 Main Street, Brattleboro, VT.

Issued: November 19, 1971, in Germantown, Md.

ATOMIC SAFETY AND LICENSING BOARD,
SAMUEL W. JENSCH,
Chairman.

[FR Doc.71-17270 Filed 11-24-71;8:53 am]

CIVIL AERONAUTICS BOARD

[Docket No. 23960]

AIR BRITISH VIRGIN ISLANDS (AIR B.V.I.) LTD.

Notice of Prehearing Conference and Hearing

Notice is hereby given that a prehearing conference in the above-entitled matter is assigned to be held on December 15, 1971, at 10 a.m., local time, in Room 503, Universal Building, 1825 Connecticut Avenue NW., Washington, DC, before Examiner Henry Whitehouse.

Notice is also given that the hearing may be held immediately following conclusion of the prehearing conference unless a person objects or shows reason for postponement on or before December 7, 1971.

Dated at Washington, D.C., November 22, 1971.

[SEAL] RALPH L. WISER,
Chief Examiner.

[FR Doc.71-17275 Filed 11-24-71;8:55 am]

[Docket No. 23837]

BASLER FLIGHT SERVICE, INC.

Enforcement Proceeding; Notice of Postponement of Hearing

Notice is hereby given, pursuant to the provisions of the Federal Aviation Act of 1958, as amended, that a hearing in the above-entitled proceeding has been postponed from December 1, 1971, to December 14, 1971, at 10 a.m., local time, in Room 503, Universal Building, 1825 Connecticut Avenue NW., Washington, DC, before the undersigned.

For information concerning the issues involved and other details in this proceeding, interested persons are referred to the documents which are in the docket of this proceeding on file in the Docket Section of the Civil Aeronautics Board.

Dated at Washington, D.C., November 22, 1971.

[SEAL] RICHARD M. HARTSOCK,
Hearing Examiner.

[FR Doc.71-17276 Filed 11-24-71;8:55 am]

[Docket No. 23693]

BETRIEBS - KOMMANDITGESELLSCHAFT AIR KOMMERZ FLUGGSELLSCHAFT m.b.H. & CO.

Notice of Hearing

Notice is hereby given, pursuant to the provisions of the Federal Aviation Act of 1958, as amended, that a public hearing in the above-entitled proceeding is assigned to be held on December 21, 1971, at 10 a.m., local time, in Room 503, Universal Building, 1825 Connecticut Avenue NW., Washington, DC, before the undersigned examiner.

For information concerning the issues involved and other details of this proceeding, interested persons are referred to the Report of Prehearing Conference and other documents which are in the docket of this case on file in the Docket Section of the Civil Aeronautics Board.

Dated at Washington, D.C., November 22, 1971.

[SEAL] HYMAN GOLDBERG,
Hearing Examiner.

[FR Doc.71-17277 Filed 11-24-71;8:55 am]

[Docket No. 23942; Order 71-11-77]

DELTA AIR LINES, INC.

Order Dismissing Complaint

Adopted by the Civil Aeronautics Board at its office in Washington, D.C., on the 19th day of November 1971.

By tariff¹ marked to become effective December 16, 1971, Delta Air Lines, Inc. (Delta) proposes to establish round-trip peak and off-peak individual tour-basing fares from 10 midwestern cities to Miami, Fort Lauderdale, West Palm Beach, Orlando, and Tampa and return.² The fares are \$0.93 higher than existing group inclusive tour fares in competitive markets, and reflect discounts ranging from 1 to 23 percent during the peak period, and from 12 to 35 percent during the off-peak period.³ Four-day minimum- and 20-day maximum-stay limits would apply and reservations must be made 14 days in advance. The minimum tour add-on is \$75, and one tour conductor may be transported for each 15 passengers in

the group at a 25-percent discount from the fare. The tariff is marked to expire on September 30, 1972.⁴

In support of its proposal, Delta asserts that individual tour-basing fares are less costly to the carrier than similar group fares because they eliminate the additional workload required to assign and manage blocked space, monitor group members who check in on an individual basis, and verify the accounting and use of transportation by group passengers in order to insure that tariff provisions are being fulfilled. The carrier further contends that individual tours are more generative as they are easier to administer and can be promoted by all travel agencies, regardless of size, and that eliminating blocked space will permit a more even distribution of passengers on all flights.

Eastern Air Lines, Inc. (Eastern) has complained against the proposal requesting suspension and investigation. Eastern alleges that the average length of stay in Florida increases significantly with the onset of the peak season, and that a 4-day minimum-stay will not prevent excessive dilution. Based on their own in-flight survey, some 70 percent of Florida peak-season travelers allegedly stay more than 4 days and 53 percent would qualify for the 20-day maximum-stay limit. The carrier further alleges that Delta's statements as to a more even load factor among flights and lower costs are invalid in the absence of supporting data. Eastern contends that advance knowledge of travel plans allows carriers to arrange for blocked space on selected flights, and that individual passengers are more likely to travel on peak flights which would increase load factor variations.

Upon consideration of all relevant matters, the Board finds that the complaint does not set forth sufficient facts to warrant investigation of the proposal and the request therefor, and consequently the request for suspension, will be denied and the complaint dismissed. The fares and the restrictions on their use are quite similar to existing individual inclusive tour fares from northeast points to Florida, and the discounts are within the range of comparable promotional fares in this and other markets. The fact that the fares are set at about the level of group inclusive tour fares in this market does not per se establish that they are unreasonable, in our opinion.

However, we will expect the carriers offering these fares to bear the risk of the promotional experiment, and we do not intend to treat any dilution of fare

¹ The tariff also provides discounts for children accompanied by an adult. The issue of the lawfulness per se of discounts for accompanying family members is included in Phase 5 of the Domestic Passenger-Fare Investigation, Docket 21866-5. In the event that the Board there concludes that such fares are unjustly discriminatory, the Board would take appropriate action looking toward the cancellation of such discounts embraced in the instant filing. Accordingly, our determination not to institute an investigation of these fares should not be construed as any prejudgment of the issues in Docket 21866-5.

yield which may result as furnishing a basis for future increases in the level of basic fares. We will also expect the carriers to maintain records of traffic, revenues, and expenses, sufficient for a full evaluation of the profit impact of this fare plan.

Accordingly, pursuant to the Federal Aviation Act of 1958, and particularly sections 204(a), 403, 404, and 1003 thereof,

It is ordered, That:

1. The complaint of Eastern Air Lines, Inc., in Docket 23942 is hereby dismissed; and

2. A copy of this order be served upon Delta Air Lines, Inc., and Eastern Air Lines, Inc.

This order will be published in the FEDERAL REGISTER.

By the Civil Aeronautics Board.

[SEAL] HARRY J. ZINK,
Secretary.

[FR Doc.71-17282 Filed 11-24-71;8:54 am]

[Docket No. 23970]

**DOMINICANA DE AVIACION,
C. POR A.**

Notice of Prehearing Conference and Hearing

Notice is hereby given that a prehearing conference in the above-entitled matter is assigned to be held on December 8, 1971, at 10 a.m., local time, in Room 911, Universal Building, 1825 Connecticut Avenue NW., Washington, DC, before Examiner Joseph L. Fitzmaurice.

Notice is also given that the hearing may be held immediately following conclusion of the prehearing conference unless a person objects or shows reason for postponement on or before December 1, 1971.

Dated at Washington, D.C., November 22, 1971.

[SEAL] RALPH L. WISER,
Chief Examiner.

[FR Doc.71-17278 Filed 11-24-71;8:55 am]

[Docket No. 23486; Order 71-11-78]

**INTERNATIONAL AIR TRANSPORT
ASSOCIATION**

**Order Regarding Passenger Fare
Matters**

Issued under delegated authority November 19, 1971.

An agreement has been filed with the Board pursuant to section 412(a) of the Federal Aviation Act of 1958 (the Act) and Part 261 of the Board's Economic Regulations, between various air carriers, foreign air carriers, and other carriers, embodied in the resolutions of Traffic Conference 2 of the International Air Transport Association (IATA). The agreement, which was adopted at the Miami passenger fare conference in the fall of 1971 for early effectiveness, has been assigned the above-designated CAB agreement number.

¹ Delta Air Lines, Inc., Tariff CAB No. 157.
² Chicago, Cincinnati, Columbus (Ohio), Dayton, Detroit, Fort Wayne, Indianapolis, Louisville, St. Louis, and Toledo.

³ Peak period is from December 16, 1971-April 15, 1972; off-peak April 16, 1972-September 30, 1972.

Insofar as it would have application in air transportation as defined by the Act, the subject agreement is procedural and would rescind an earlier adopted resolution¹ which enabled a more flexible adjustment in rates of exchange agreed by IATA for the publishing or converting of fares, rates, and other charges specified in basic currencies (dollars and pounds sterling) into local currencies within Europe/Middle East/Africa. This rescission is effective December 1, 1971, or upon the coming into effect of other specific resolutions designed for the same and other purposes, whichever is later. The balance of the subject agreement, over which we are herein disclaiming jurisdiction, relates to creative fares between London and Pisa.

Pursuant to authority duly delegated by the Board in the Board's Regulations, 14 CFR 385.14:

1. It is not found, on a tentative basis, that the following resolution, which is incorporated in the agreement as indicated, is adverse to the public interest or in violation of the Act:

Agreement CAB No.	IATA No.	Title	Application
R-50.....	003	Standard Rescission Resolution.	2

2. It is not found that the following resolution, which is incorporated in the agreement as indicated, affects air transportation within the meaning of the Act:

Agreement CAB No.	IATA No.	Title	Application
R-51.....	072a	TC2 Creative Fares Board—Europe (Amending).	2

Accordingly, it is ordered, That:

1. Action on Agreement CAB 22663, R-50, be and hereby is deferred with a view toward eventual approval; and

2. Jurisdiction be and hereby is disclaimed with respect to Agreement CAB 22663, R-51.

Persons entitled to petition the Board for review of this order pursuant to the Board's Regulations, 14 CFR 385.50, may, within 10 days after the date of service of this order, file such petitions in support of or in opposition to our proposed action herein.

This order will be published in the FEDERAL REGISTER.

[SEAL] HARRY J. ZINK,
Secretary.

[FR Doc.71-17283 Filed 11-24-71;8:54 am]

¹ Approved by Order 71-5-102, dated May 21, 1971.

[Docket No. 23333; Order 71-11-79]

INTERNATIONAL AIR TRANSPORT ASSOCIATION

Order Regarding Commissions for Cargo Sales Agents

Issued under delegated authority November 19, 1971.

By Order 71-10-19, dated October 5, 1971, action was deferred on an agreement adopted by the Traffic Conferences of the International Air Transport Association (IATA). Among other things, the agreement included provisions which would have the effect of allowing commissions to be paid to cargo sales agents in respect of international route charges and, consistent with earlier action by the Board with respect to such route charges,¹ action was deferred with a view toward eventual disapproval of the application of this element of the agreement in air transportation.

In deferring action on the agreement, 10 days were granted in which interested persons might file petitions in support of or in opposition to the proposed action. No petitions have been received within the filing period, and the tentative conclusions in Order 71-10-19 with respect to the subject agreement will herein be made final.

Accordingly, it is ordered, That:

Agreement CAB 22529, R-2 and R-3, be and hereby is disapproved insofar as it would have application in air transportation as defined by the Federal Aviation Act of 1958.

This order will be published in the FEDERAL REGISTER.

[SEAL] HARRY J. ZINK,
Secretary.

[FR Doc.71-17284 Filed 11-24-71;8:54 am]

[Docket No. 23987]

J. D. KAYE INTERNATIONAL LTD.

Notice of Prehearing Conference and Hearing

Notice is hereby given that a prehearing conference in the above-entitled matter is assigned to be held on December 22, 1971, at 10 a.m., local time, in Room 805, Universal Building, 1825 Connecticut Avenue NW., Washington, DC, before Examiner Merritt Ruhlen.

Notice is also given that the hearing may be held immediately following conclusion of the prehearing conference unless a person objects or shows reason for postponement on or before December 15, 1971.

Dated at Washington, D.C., November 22, 1971.

[SEAL] RALPH L. WISER,
Chief Examiner.

[FR Doc.71-17279 Filed 11-24-71;8:55 am]

¹ Order 71-9-43, dated September 9, 1971.

[Docket No. 23760]

KODIAK AIRWAYS, INC./WESTERN ALASKA AIRLINES, INC. MERGER

Notice of Prehearing Conference

Notice is hereby given that a prehearing conference in the above-entitled matter is assigned to be held on December 20, 1971, at 10 a.m., local time, in Room 911, Universal Building, 1825 Connecticut Avenue NW., Washington, DC, before Examiner Merritt Ruhlen.

In order to facilitate the conduct of the conference parties are instructed to submit to the Examiner and other parties: (1) Proposed statements of issues; (2) proposed stipulations; (3) requests for information; (4) statement of positions of parties; and (5) proposed procedural dates. The Bureau of Operating Rights will circulate its material on or before December 3, 1971, and the other parties on or before December 14, 1971. The submissions of the other parties shall be limited to points on which they differ with the Bureau of Operating Rights.

Dated at Washington, D.C., November 22, 1971.

[SEAL] RALPH L. WISER,
Chief Examiner.

[FR Doc.71-17280 Filed 11-24-71;8:55 am]

[Docket No. 23901]

LUFTHANSA GERMAN AIRLINES

Notice of Prehearing Conference and Hearing

Notice is hereby given that a prehearing conference in the above-entitled matter is assigned to be held on December 17, 1971, at 10 a.m., local time, in Room 503, Universal Building, 1825 Connecticut Avenue NW., Washington, DC, before Examiner Thomas P. Sheehan.

Notice is also given that the hearing may be held immediately following conclusion of the prehearing conference unless a person objects or shows reason for postponement on or before December 10, 1971.

Dated at Washington, D.C., November 22, 1971.

[SEAL] RALPH L. WISER,
Chief Examiner.

[FR Doc.71-17281 Filed 11-24-71;8:55 am]

RAILROAD RETIREMENT BOARD

RAILROAD RETIREMENT TAX ACT

Determination of Quarterly Rate of Excise Tax for Railroad Retirement Supplemental Annuity Program

In accordance with directions in section 3221(c) of the Railroad Retirement Tax Act (26 U.S.C. section 3221(c)) as amended by section 5(a) of Public Law

91-215, the Railroad Retirement Board has determined that the excise tax imposed by such section 3221(c) on every employer, with respect to having individuals in his employ, for each man-hour for which compensation is paid by such employer for services rendered to him during the quarter beginning January 1, 1972, shall be at the rate of six cents.

Dated: November 19, 1971.

By authority of the Board.

[SEAL] RICHARD F. BUTLER,
Secretary of the Board.

[FR Doc.71-17213 Filed 11-24-71;8:51 am]

FEDERAL COMMUNICATIONS COMMISSION

[Report No. 571]

COMMON CARRIER SERVICES INFORMATION¹

Domestic Public Radio Services Applications Accepted for Filing²

NOVEMBER 22, 1971.

Pursuant to §§ 1.227(b) (3) and 21.30 (b) of the Commission's rules, an application, in order to be considered with any domestic public radio services application appearing on the attached list, must be substantially complete and tendered for filing by whichever date is earlier: (a) The close of business 1 business day preceding the day on which the Commission takes action on the previously filed application; or (b) within 60 days after the date of the public notice listing the first prior filed application (with which subsequent applications are in conflict) as having been accepted for filing. An application which is subsequently amended by a major change will be considered to be a newly filed application. It is to be noted that the cutoff dates are set forth in the alternative—applications will be entitled to consideration with those listed in the appendix if filed by the end of the 60-day period, only if the Commission has not acted upon the application by that time pursuant to the first alternative earlier date. The mutual exclusivity rights of a new application are governed by the earliest action with respect to any one of the earlier filed conflicting applications.

¹All applications listed in the appendix are subject to further consideration and review and may be returned and/or dismissed if not found to be in accordance with the Commission's rules, regulations, and other requirements.

²The above alternative cutoff rules apply to those applications listed below as having been accepted in Domestic Public Land Mobile Radio, Rural Radio, Point-to-Point Microwave Radio, and Local Television Transmission Services (Part 21 of the rules).

The attention of any party in interest desiring to file pleadings pursuant to Section 309 of the Communications Act of 1934, as amended, concerning any domestic public radio services application accepted for filing, is directed to § 21.27 of the Commission's rules for provisions

governing the time for filing and other requirements relating to such pleadings.

FEDERAL COMMUNICATIONS
COMMISSION,

[SEAL] BEN F. WAPLE,
Secretary.

APPLICATIONS ACCEPTED FOR FILING

DOMESTIC PUBLIC LAND MOBILE RADIO SERVICE

- 2915-C2-P-72—Electrocom Corp. (KCB891), for additional facilities to operate on 35.58 MHz at a new site described as location No. 2: 350 Cedar Street, Needham, MA.
- 2918-C2-P-72—Waco Communications, Inc. (KQZ760), to change the antenna system and relocate facilities operating on 158.70 MHz to Kyle Hotel, 111 North Main Street, Temple, TX.
- 2919-C2-P-72—AAA Anserphone, Inc.—Jackson (New), for a new 2-way station to be located east of Highway No. 7 North, approximately 4 miles north of Oxford, Miss., to operate on 152.21 MHz.
- 2920-C2-P-72—AAA Anserphone, Inc.—Jackson (New), for a new 2-way station to be located on Sweet Home Road at Highway No. 8, Grenada, Miss., to operate on 152.06 MHz.
- 2921-C2-P-72—Central Communications, Inc. (New), for a new 1-way station to be located on State Route No. 13, at Water Tower, west of Albert Lea, Minn., to operate on 158.700 MHz.
- 2922-C2-P-72—Central Communications, Inc. (New), for a new 1-way station to be located at the Water Tower, Owatonna, Minn., to operate on 158.700 MHz.
- 2923-C2-P-72—Central Communications, Inc. (New), for a new 1-way station to be located at St. Olaf Hospital, Austin, Minn., to operate on 158.700 MHz.
- 2945-C2-AL-72—Loomis Electronic Protection, Inc., consent to assignment of license from Loomis Electronic Protection, Inc., Assignor, to: Pass Word, Inc., Assignee, Station KOA271, Spokane, Wash.
- 2946-C2-MP-(2)-72—Delta Valley Radiotelephone Co., Inc. (KMA743), to relocate control facilities operating on 75.46 and 75.82 MHz from location No. 3 to location No. 1: 3502 Kroy Way, Sacramento, CA.
- 2951-C2-P-72—Radio Telephone Service (New), for a new 1-way station to be located at No. 2 Peachtree Street, Atlanta, GA, to operate on 43.22 MHz.
- 2952-C2-P-72—Empire Communications Co. (New), for a new 1-way station to be located at 521 South Central Street, Medford, OR, to operate on 152.24 MHz.
- 2953-C2-(3)-72—Empire Communications Co. (KLP595), to add control facilities at location No. 1: 162 East Sixth Avenue, Eugene, OR, on 75.54 MHz; add base facilities on 152.24 MHz at a new site described as location No. 2: McDonald Forest, 4 miles north Corvallis, Oreg., and add control facilities on 75.54 MHz at a new site described as location No. 3: 161 High Street, Salem, OR.
- 2954-C2-P-72—General Communications Co. (New), for a new 1-way station to be located at Route No. 8, Fairmont, W. Va., to operate on 35.22 MHz.
- 2955-C2-AL-72—Vermont Telephone Corp., consent to assignment of license from Vermont Telephone Corp., Assignor, to: Vermont State Telephone Corp., Assignee, Station KCC798 North Ferrisburg, Vt.
- 2956-C2-P-72—Harold's Radio Service (KSD321), for additional facilities to operate on 152.120 MHz, at new site described as location No. 2: 1204 East Tennessee Street, Evansville, IN.
- 2957-C2-P-72—Harold's Radio Service (New), for a new 1-way station to be located at 1204 East Tennessee Street, Evansville, IN, to operate on 152.240 MHz.
- 2960-C2-AL-(3)-72—Central Telephone Co. of Illinois, consent to assignment of license from Central Telephone Co. of Illinois, Assignor, to: New Centel Illinois, Inc., Assignee, Stations: KRS701 Pekin, Ill. (1-way); KFP929 Pekin, Ill., and KSD683 Dixon, Ill.
- 2962-C2-P-72—Western Valley Telephone Co. (KOK413), replace transmitter operating on 454.45 MHz at 9833 Southeast East View Drive, near Portland, Oreg.
- 2964-C2-P-72—Baymore Communications (KLP565), for additional facilities to operate on 152.12 MHz at intersection of U.S. No. 31 and County No. 41 and No. 61 northwest of Bench Mark No. 288, Perdido, Ala.
- 2974-C2-P-72—Hanover Telephone Answering Service, Inc. (New), for a new 2-way station to be located at Crafts Hill, West Lebanon, N.H., to operate on 152.18 MHz.
- 2975-C2-TC-(6)-72—Tel/Sec Radio, Inc., consent to transfer of control from Margaret Walsh, Transferor, to: Richard D. Cahill and Lorna Cahill, Transferees, Stations: KLF607 Green Bay, Wis., KLP645 Green Bay, Wis. (1-way), KRM974 Manitowoc, Wis., KRH668 Oshkosh, Wis., KRS627 Appleton, Wis. (1-way), and KSJ762 Appleton, Wis.

RURAL RADIO SERVICE

- 2916-C1-P-72—The Offshore Telephone Co. (New), for a new central office fixed station to be located at Platform A, Block 195, East Cameron, Gulf of Mexico, to operate on 454.650 MHz.
- 2917-C1-ML-72—The Offshore Telephone Co. (KKT89), for authority to communicate with the above new central office fixed station, (55 units) in any temporary fixed location within the Gulf of Mexico, in vicinity of central office, operating on 459.50, 459.55, and 459.60 MHz.

Correction

2256-C1-P-ML-72—Continental Telephone Co. of California (KNLA47), correct frequencies to read: 157.80, 157.83, 157.86, 157.89, 157.92, 157.95, 157.98, 158.01, 158.04, and 158.07 MHz. See Public Notice dated Nov. 1, 1971, Report No. 568.

POINT-TO-POINT MICROWAVE RADIO SERVICE (TELEPHONE CARRIER)

2950-C1-P-72—South Central Bell Telephone Co. (KJ773), location: 1 mile east of Signal Mountain, Tenn. To add frequency 10,755 MHz toward Chattanooga, Tenn.

2961-C1-AP-72—Central Telephone Co. of Illinois (WDD89), consent to assignment of license from Central Telephone Co. of Illinois, Assignor, to: New Central Illinois, Inc., Assignee.

2963-C1-MP-72—The Mountain States Telephone & Telegraph Co. (WGH92), to add frequencies 11,965 and 11,966 MHz toward Big Sky, Mont., via passive reflector, a new point of communication, latitude 45°07'15" N., longitude 111°02'18" W. Location: 8.3 miles southwest of Miner, Mont.

The following applications for developmental modification of license were filed by American Telephone & Telegraph Co. They request developmental authority to make laboratory tests in certain Western Electric Type TD-2 transmitters at the following nine radio relay stations between Kansas City and St. Louis, Mo., to evaluate the feasibility of increased circuit loading and other equipment improvements. It is represented that, except for an increase in output power from the currently authorized level of 2 watts to a 5-watt level, the emission characteristics of the transmitters will be unchanged. Waiver of section 21.404(d) of the FCC rules is requested to permit the continued rendition of public service during the developmental tests:

2965-C1-MI-72—Kansas City, Mo. (KACT3), frequencies: 3730, 3810, 3890, 3950, 3970, 4030, 4050, 4110, and 4130 MHz toward Elkhorn, Mo.

2966-C1-MI-72—Elkhorn, Mo. (KAH91), frequencies: 3770, 3850, 3930, 3990, 4010, 4070, 4090, 4150, and 4170 MHz toward Kansas City, Mo.

2967-C1-MI-72—Dover, Mo. (KAH92), frequencies: 3730, 3810, 3890, 3950, 3970, 4030, 4050, 4110, and 4130 MHz toward Elkhorn, Mo., and 3730, 3790, 3890, and 4110 MHz toward Slater, Mo.

2968-C1-MI-72—Slater, Mo. (KAH93), frequencies: 3770, 3830, 3930, and 4150 MHz toward Dover, Mo., and toward Prairie Home, Mo.

2969-C1-MI-72—Prairie Home, Mo. (KA178), frequencies: 3730, 3790, 3890, and 4110 MHz toward Slater, Mo., and Holts Summit, Mo.

2970-C1-MI-72—Holts Summit, Mo. (KA179), frequencies: 3770, 3830, 3930, and 4150 MHz toward Prairie Home, Mo., and Hermann, Mo.

2971-C1-MI-72—Hermann, Mo. (KA180), frequencies: 3730, 3790, 3890, and 4110 MHz toward Holts Summit, Mo., and Gray Summit, Mo.

2972-C1-MI-72—Gray Summit, Mo. (KA181), frequencies: 3770, 3830, 3930, and 4150 MHz toward Hermann, Mo., and 3710, 3870, 4050, and 4130 MHz toward St. Louis, Mo.

2973-C1-MI-72—St. Louis, Mo. (KAH84), frequencies: 3750, 3910, 4090, and 4170 MHz toward Gray Summit, Mo.

POINT-TO-POINT MICROWAVE RADIO SERVICE (NONTELEPHONE)

2976-C1-P-72—Cablecom-General, Inc. (K1A98), Location: 4.7 miles southeast of Seiling, Okla., at latitude 36°05'00" N., longitude 98°51'30" W. To change frequencies from 5937.5, 6037.5, and 6137.5 MHz to 5945.2, 6044.4, and 6063.8 MHz and add frequency 6193.1 MHz on azimuth 308°00'. Add a new point of communication at Mooreland, Okla., using the four frequencies above on an azimuth of 321°45'. Applicant proposes to provide the television signal of Station KETA-TV to Tru-Vu Community T.V. in Woodward, Okla., and KETA-TV, WKY-TV, WKTV, and KOCO-TV to Mooreland Television Co. in Mooreland, Okla.

The following applicants propose to establish omnidirectional facilities for the provision of common carrier "Subscriber-Programmed" television service.

2932-C1-P-72—Microband Corp. of America (New), a new station located at First National Bank Building, Fourth and Main Streets, Louisville, KY, latitude 38°15'22" N., longitude 85°45'25" W. Frequencies: 2152.325 MHz (visual) and 2150.20 MHz (aural) toward various receiving points of system and 2158.50 MHz (visual) and 2154.00 MHz (aural) toward various receiving points of system.

2933-C1-P-72—Microband Corp. of America (New), a new station at Baystate West Valley Bank Tower, Main and Bridge Streets, Springfield, MA, latitude 42°05'11" N., longitude 72°35'42" W. Frequencies: 2152.325 MHz (visual) and 2150.20 MHz (aural) toward various receiving points of system and 2158.50 MHz (visual) and 2154.00 MHz (aural) toward various receiving points of system.

2934-C1-P-72—Paul E. Taft, doing business as Taft Broadcasting Co. (New), a new station at 595 Orleans Street, Beaumont, TX, latitude 30°04'50" N., longitude 94°05'45" W., latitude 30°04'50" N., longitude 94°05'45" W. Frequencies: 2154.775 MHz (visual) and 2150.275 MHz toward various receiving points of system.

2935-C1-P-72—Multi Point Distribution Systems, Inc. (New), a new station at 600 Broadway Building, Corpus Christi, TX, latitude 27°47'46" N., longitude 97°23'45" W. Frequencies: 2154.775 MHz (visual) and 2150.275 MHz (aural) toward various receiving points of system.

2936-C1-P-72—Multi Point Distribution Systems, Inc. (New), a new station at El Paso, Tex., Ranger Peak in Franklin Mountains, approximately 1 mile west of El Paso, latitude 31°48'18.5" N., longitude 106°28'57" W. Frequencies: 2154.775 MHz (visual) and 2150.275 MHz (aural) toward various receiving points of system.

2937-C1-P-72—Multi Point Distribution Systems, Inc. (New), a new station at 310 Villita Street, San Antonio, TX, latitude 29°25'21" N., longitude 98°29'26" W. Frequencies: 2154.775 MHz (visual) and 2150.275 MHz (aural) toward various receiving points of system.

2938-C1-P-72—Multi Point Distribution Systems, Inc. (New), a new station at 714 Houston Street, Continental National Bank Building, Fort Worth, TX, latitude 32°45'06" N., longitude 97°19'50" W. Frequencies: 2154.775 MHz (visual) and 2150.275 MHz (aural) toward various receiving points of system.

2939-C1-P-72—Multi Point Distribution Systems, Inc. (New), a new station at 1212 Guadalupe Street, Austin, TX, latitude 30°16'33" N., longitude 97°44'37" W. Frequencies: 2154.775 MHz (visual) and 2150.275 MHz (aural) toward various receiving points of system.

The following applicants propose to establish omnidirectional facilities for the provision of common carrier "Subscriber-Programmed" television service.

2940-C1-P-72—Cleveland Video Services, Inc. (New), a new station located at Terminal Tower Building, Cleveland, Ohio, latitude 41°29'55" N., longitude 81°41'40" W. Frequencies: 2150.200 MHz (aural) and 2152.325 MHz (visual) toward various receiving points of system and 2154.000 MHz (aural) and 2158.500 MHz (visual) toward various receiving points of system.

2941-C1-P-72—Parker Industries, Inc. (New), a new station at Auburn Street, Worcester, Mass., latitude 42°13'33" N., longitude 71°52'52" W. Frequencies: 2150.20 MHz (aural) and 2152.325 MHz (visual) and 2154.00 MHz (aural) and 2158.50 MHz (visual) toward various receiving points of system.

[FR Doc. 71-17256 Filed 11-24-71; 8:53 am]

[Docket No. 19260; FCC 71-1168]

FAIRNESS DOCTRINE AND PUBLIC INTEREST STANDARDS

Order Extending Time

In the matter of the handling of public issues under the Fairness Doctrine and the Public Interest Standards of the Communications Act; Docket No. 19260.

1. The Commission has before it the request of the National Association of Broadcasters . . . that the Commission extend the time in which comments in the second phase of this proceeding must be filed from December 10, 1971, to

January 10, 1972. The basic ground is that the question of access to the media is complex and is integrally tied in with the recent decision in *BEM v. FCC*, Case No. 24,492, C.A.D.C., as to which further review steps are planned. The access issues related to *BEM* are set out in part IV of the inquiry. While these issues are of course relevant to the other parts of the Inquiry, we nevertheless believe it appropriate to proceed expeditiously with these other parts. Part II is an important overlay to the entire proceeding, and part V should be resolved as expeditiously as possible, in view of the im-

minence of the 1972 political campaign. We shall therefore grant the one-month extension only as to part IV, because of the litigation uncertainties noted during this period. We also note that this staggering of the filing dates facilitates the digesting of the comments, and thus will not delay the resolution of the important issues in this proceeding.

2. In the alternative, the NAB points out that reply comments in part III are presently due on November 24, and that it would be helpful, in view of the complex issues involved in the inquiry, if the due date for the other parts were set back 10 days. This is a reasonable request, particularly since the comments will still be received before any holiday hiatus.

3. Accordingly, it is ordered. That the day for filing comments in part IV of the inquiry is extended to January 10, 1972, with reply comments in this part due February 10, 1972; and that the time for filing comments in parts II and V is extended to December 20, 1971, with the reply comments due on January 29, 1972.

Adopted: November 18, 1971.

Released: November 19, 1971.

FEDERAL COMMUNICATIONS
COMMISSION,¹

[SEAL] BEN F. WAPLE,
Secretary.

[FR Doc. 71-17260 Filed 11-24-71; 8:53 am]

[FCC 71-1166]

CERTAIN ABC COLLEGE FOOTBALL TELECASTS

Memorandum Opinion and Order Regarding Prime Time Access Rule

In the matter of requests for waiver of § 73.658(k), the "Prime Time Access" rule, in connection with certain ABC college football telecasts (requests of ABC and of Station KTVK, Phoenix, Ariz.).

1. The Commission here considers two requests for waiver of the "prime time access" rule, § 73.658(k) of our rules, which, after October 1, 1971, in general limits to 3 hours the amount of network programming which television stations may carry each evening during "prime time" (defined as 7 to 11 p.m., local time, except 6-10 p.m., c.t. in the central time zone). The requests, from American Broadcasting Companies, Inc. (ABC), filed November 10, 1971, and the licensee of Station KTVK, Phoenix, Ariz., filed October 27, 1971, both relate to carriage of ABC football games.

The ABC request. 2. In its consideration of various waiver requests early in October, the Commission denied a number of those by ABC concerning football broadcasts and other sports events, while granting several requests by NBC and CBS concerning the same types of material. See memorandum opinion and order adopted October 6, 1971, released

¹ Commissioners Bartley and Reid absent; Commissioner Johnson concurring.

October 12, 1971, FCC 71-1037, paragraphs 2-3 concerning NBC and CBS, paragraphs 4-9 concerning ABC. The difference was that the CBS and NBC requests, mostly in connection with pro football, contemplated in general that the coverage would be completed before prime time begins, e.g. a game starting at 4 p.m., e.t. would be over before 7 p.m., e.t., and would involve a "runover" only in unusual circumstances such as an unusual delay or "sudden death" playoff. ABC, on the other hand, contemplated incursion into the early part of prime time by its football or other sports coverage, more or less as a matter of course, while continuing to present the regular three hours of prime time network programs in the evening. Thus, in its earlier waiver requests it allocated 3½ hours for its NCAA football coverage, and asked us to permit this to run until 7:30 or 8 p.m., e.t., with no cutback in evening network programming later.¹ These requests were denied.

3. ABC has made readjustments in some of these dates, so that, it claims, the college football telecasts "are scheduled to be completed prior to prime time" and "can be carried in their scheduled times without conflict with the three-hour limit." However, waiver is now requested, in case it should be necessary, in three cases where the game coverage is scheduled from 4 to 7 p.m., e.t., and in one where it is from 3:30 to 7 p.m., e.t. Waiver is requested in case the games have "unanticipated runovers" or "should unexpectedly run" past the 7 p.m. scheduled completion time.² It is also stated that the "scoreboard" program usually following its NCAA telecasts will not be carried in the event of runover into prime time, so that "the waivers will be utilized only to carry the football game telecasts to completion." It appears that, in general, the readjustments made have consisted in rescheduling the games to start a half-hour or 1 hour earlier, and in reallocating time so that the coverage is scheduled for completion in 3 hours.

4. We are not persuaded that, even without the "scoreboard" show referred to, the "runover" after 7 p.m. in three of these cases would be as unexpected as ABC claims. It appears that its game coverage this fall has often run slightly over 3 hours, from starting time of the telecast to the final whistle and completion of the game coverage (the November 6 afternoon contest appeared to be about 3 hours 7 minutes on this basis). This is somewhat longer than the CBS and NBC pro-football coverage, which has usually been completed by 7 when the games start at 4 p.m., e.t. The ABC situations thus do not appear to fall com-

¹ As detailed in the earlier memorandum opinion and order, some of the ABC requests for specific dates involved different arrangements, but the principle was the same.

² The four dates are Nov. 20 and Nov. 27, 1971 (NCAA games) and Dec. 31, 1971, and Jan. 8, 1972 (Bowl games). The first is scheduled to begin at 3:30 p.m., e.t., the rest at 4 p.m., e.t.

pletely within the scope of "Footnote 35" of the report and order in Docket 12782 (23 FCC 2d 382), where we stated that waiver would be granted in "occasional instances" to permit the completion of coverage of events which "normally" are concluded before the beginning of prime time. However, we must also recognize that the incursion into prime time is both small (e.g. the 7 minutes mentioned) if it occurs at all, and will occur only on a small number of days. The resulting disruption of regular evening network programming which would probably occur if waiver were denied appears to outweigh the public benefit involved in strict adherence to the rule. Accordingly waiver is granted in these four cases. However, it is granted only to the extent requested by ABC—"to carry the football game telecasts to completion"—and thus will not cover any post-game "scoreboard" show to the extent waiver would be involved. Also, this waiver is granted only for events occurring in this football season, during the initial months of operation under the rule, and is not to be taken as any indication that further waivers will be granted in similar circumstances later, when ABC and other parties will have had more opportunity to make adjustments.

Request of Station KTVK, Phoenix, Ariz. 5. The second request mentioned above is from Station KTVK, Phoenix, in connection with evening ABC college football games, to be carried as the latter portions of "doubleheaders" on November 20 and November 25 (Thanksgiving Day), 1971. The waiver request is necessary only because of the station's situation in the Mountain time zone. Coverage of these games is scheduled to begin on the network at 8 p.m., e.t., and thus any "runover" beyond 3 hours in the eastern and central zones would be outside of prime time. However, this is 6 p.m., m.t., the beginning of prime time for this station,³ and if the game coverage runs over 3 hours KTVK will not be able to carry it to completion without a waiver, which accordingly is requested in case it should be necessary. The station plans no other prime time network programming on these evenings.

6. In our judgement, waiver in this case is warranted, perhaps even more so than in connection with the ABC requests mentioned, because there is not involved here a question of possibly reducing other network programming. If the game runs over 3 hours and the station is not granted a waiver, it will simply have to terminate the coverage before the end of the game, obviously something not to be desired. Accordingly, waiver is granted, but limited as with ABC's requests above, to the extent necessary to carry the football game telecast to completion.

³ KTVK, like the other Phoenix stations, has taken advantage of the permission given by the Commission to redesignate its prime time hours as 6 to 10 p.m., m.t. However, unlike the others, it has not chosen to designate instead the period from 5 to 9 p.m. Saturdays and Sundays as prime time.

7. In view of the foregoing: *It is ordered*, That waiver of § 73.658(k) is granted, as follows:

(1) To affiliates of the American Broadcasting Companies, Inc. (ABC) television network, to carry to their completion (but not including any postgame show) telecasts of college or all-star football games carried on ABC and starting at 3:30 or 4 p.m., e.t., on November 20, November 27, and December 31, 1971, and January 8, 1972, without any of the time counting toward the 3 hours of permissible network programs on those dates; and

(2) To Station KTVK, Phoenix, Ariz., to carry to completion (but not any postgame show) telecasts of college football games carried on ABC on November 20 and November 25, 1971.

Adopted: November 17, 1971.

Released: November 18, 1971.

FEDERAL COMMUNICATIONS
COMMISSION,*

[SEAL] BEN F. WAPLE
Secretary.

[FR Doc. 71-17261 Filed 11-24-71; 8:53 am]

[Docket No. 19290; FCC 71R-334]

JOHN M. SPOTTSWOOD AND STATION WKWF, KEY WEST, FLA.

Memorandum Opinion and Order Amending Issues

In re application of John M. Spottswood, for renewal of license for Station WKWF, Key West, Fla., Docket No. 19290, File No. BR-1229.

1. By Memorandum Opinion and Order, 30 F.C.C. 2d 943, 36 F.R. 14350, published August 4, 1971, the Commission designated for hearing on various issues the renewal application of John M. Spottswood (Spottswood), the licensee of standard broadcast station WKWF, Key West, Fla.¹ Presently before the Review Board is a motion to modify issues, filed August 19, 1971, by Spottswood.²

2. Petitioner contends that Issue No. 1, as presently worded, presupposes that Spottswood refused to afford equivalent carriage on his CATV system to Florida Keys' stations, WKIZ and WFYN-FM.³

*Commissioners Bartley and H. Rex Lee absent; Commissioner Johnson dissenting.

¹The specified issues included an issue seeking:

1. To determine whether John M. Spottswood's carriage of station WKWF on the Cable-Vision, Inc., CATV system and refusal to afford equivalent carriage to stations WKIZ and WFYN-FM constituted an unfair method of competition.

By its Order, the Commission named as a party to this proceeding the licensee of stations WKIZ and WFYN-FM, Florida Keys Broadcasting Corp. (Florida Keys).

²Other related pleadings before the Board are: (a) Erratum, filed September 7, 1971, by Spottswood; (b) Broadcast Bureau's opposition, filed September 15, 1971; and (c) opposition, filed September 15, 1971, by Florida Keys.

³On September 13, 1971, Spottswood petitioned the Commission to reconsider and set aside its order designating the renewal application of station WKWF for hearing.

Asserting that he never actually or constructively refused Florida Keys' request for carriage on the Cable-Vision CATV system, Spottswood points out that as late as June 18, 1971, in a letter addressed to the Broadcast Bureau, he made an unqualified offer to carry station WKIZ as soon as that station delivered a visual and audio signal to the head-end facilities of the Cable-Vision CATV system. By letter, dated June 28, 1971, Spottswood notes, he again indicated his willingness to provide carriage by offering to assign Cable-Vision's channel 4 to Florida Keys. Alleging that the Commission overlooked the letters of June 18 and June 28, 1971, in designating the station WKWF renewal application for hearing, Spottswood urges the Review Board to modify Issue No. 1 so as to afford him an opportunity to demonstrate, at the hearing, that the Florida Keys stations had not been refused carriage on the Cable-Vision CATV system.⁴

3. Florida Keys opposes the instant motion, contending that the requested modification of Issue No. 1 is not necessary since the "question of refusal or nonrefusal is at the very heart of the case and will receive thorough investigation at the hearing" and since "any reasonable reading of Issue No. 1 gives Spottswood every opportunity * * * to present whatever material and relevant evidence he has to support his position that he has 'never refused' Florida Keys' request".⁵ With respect to Spottswood's request to delete reference to station WFYN-FM from Issue No. 1, Florida Keys alleges that while it initially requested use of a channel on the Cable-Vision CATV system in May of 1966, its intention to utilize that channel for the signal of station WFYN-FM as well as that of station WKIZ was clearly communicated to Spottswood, not only in Florida Keys' petition to deny (see paragraph 3 thereof), which was filed on January 16, 1970, but also in an April 2, 1970 letter from Mr. Gayle Swofford, the general manager of stations WKIZ and WFYN-FM.⁶ In Florida Keys' view, the requested deletion would unnecessarily and improperly limit the scope of the hearing which concerns whether Spottswood utilized his common ownership of station WKWF and the

⁴While he does not object to carriage of the station WFYN-FM signal on the CATV channel allocated to Florida Keys, Spottswood maintains that "equivalent carriage" could not be achieved by allocating an additional cable channel for station WFYN-FM since Spottswood does not have an FM facility. Accordingly, Spottswood submits that his alleged refusal to carry station WFYN-FM on the Cable-Vision CATV system should not be a matter at issue in this proceeding.

⁵The Broadcast Bureau, in its opposition pleading, agrees with Florida Keys' interpretation of Issue No. 1, and further argues that Spottswood has not shown that the Commission overlooked any material in arriving at that designated issue.

⁶The letter from Mr. Swofford, who is also a corporate officer of Florida Keys, reads in pertinent part: This is a response to the letter of January 28, 1970 regarding the request of stations WKIZ and WFYN-FM, Key West, Fla., to be carried on one channel on

Cable-Vision CATV system in an unfair manner against his broadcast competitors, stations WKIZ and WFYN-FM.

4. In Atlantic Broadcasting Co. (WUST), 5 F.C.C. 2d 717, 8 RR 2d 991 (1966), the Commission instructed subordinate officials that in a designation order where specific reasons are stated for the Commission's action or inaction or where a reasoned analysis with respect to the merits of a particular matter is set forth, the Commission's judgment is to be followed as the law of the case, absent new facts or circumstances previously unknown to the Commission. The Board notes that the Commission, in its Memorandum Opinion and Order designating this proceeding for hearing, went to great length and particularity in considering the correspondence between Spottswood, Florida Keys and the Renewal and Transfer Division of the Broadcast Bureau. See paragraphs 13 to 17 of the designation order, *supra*. However, no mention is made therein of Spottswood's letters of June 18 and June 28, 1971.⁷ Since these letters set forth Spottswood's unconditional offer to presently allocate a channel on his Cable-Vision CATV system for the use of Florida Keys and since this offer bears on the crucial question of refusal of carriage, the Review Board believes that the failure to explicitly identify these letters and thoroughly consider their contents in the designation order suggests that the letters may have been overlooked by the Commission. The Review Board, therefore, will appropriately modify the subject issue to clearly reflect the "substantial and material" questions of fact to be explored thereunder. See Cowles Florida Broadcasting, Inc. (WESH-TV), F.C.C. 71R-317, ----- F.C.C. 2d -----, released October 26, 1971; "What the Bible Says, Inc.", 11 F.C.C. 2d 620, 12 RR 2d 235 (1968). However, we will not, as requested by Spottswood, modify Issue No. 1 to eliminate consideration of the alleged refusal to carry station WFYN-FM, a matter specifically considered and placed in issue by the Commission. See paragraphs 7, 18 and 19 of the designation order, *supra*.

5. Accordingly, it is ordered, That the Motion to Modify Issues, filed August 19, 1971, by John M. Spottswood, is granted to the extent indicated below, and is denied in all other respects; and

6. It is further ordered, That Issue No. 1 as specified in the designation order herein, is amended to read as follows:

the CATV system operated in Key West by Cable Vision, Inc.

Although your letter indicates that you have not refused to provide us channel space, it does not clearly indicate that Cable Vision is presently willing to carry stations WKIZ and WFYN-FM. However, for your information I will reiterate that we are simply asking that the stations be carried on the systems under the same conditions as are now applicable to systems' carriage of WKWF. Our request is essentially unchanged from that which I detailed to you in my letter of May 18, 1966 * * *.

⁷Similarly, the designation order is silent with respect to Florida Keys' July 17, 1971 letter in response thereto.

To determine whether John M. Spottswood's carriage of station WKWF on the Cable-Vision, Inc. CATV system and his alleged refusal to afford equivalent carriage to stations WKIZ and WFYN-FM constituted an unfair method of competition.

Adopted: November 15, 1971.

Released: November 16, 1971.

FEDERAL COMMUNICATIONS
COMMISSION,*

[SEAL] BEN F. WAPLE,
Secretary.

[FR Doc. 71-17259 Filed 11-24-71; 8:53 am]

FEDERAL MARITIME COMMISSION

[Docket No. 71-88]

ASSOCIATED LATIN AMERICAN FREIGHT CONFERENCES AND AS- SOCIATION OF WEST COAST STEAMSHIP COMPANIES

Amended Tariff Rules Regarding Wharfage and Handling Charges; Order of Investigation

The Associated Latin American Freight Conferences represents a group of 10 active conferences and the Association of West Coast Steamship Companies is a conference operating pursuant to Commission-approved agreements in trades between U.S. Atlantic and Gulf ports and ports in Central and South America and various neighboring islands. A list of these conferences and the member lines is attached as appendix A below.

These conferences have revised their tariff rules regarding wharfage and handling charges so as to fix wharfage and handling charges at the ports of New York and Philadelphia and generally to shift the assessment of wharfage and handling charges at other U.S. Atlantic and Gulf ports from carrier to cargo. These charges presently bear effective dates of November 15 and December 1, 1971. Appendix B attached¹ contains a typical specimen of the revised tariff rules as published by one of the subject conferences.

The publication of such tariff rules results in the assessment of charges by the conferences which vary in amount from port to port in the continental United States. The Commission has received protests pursuant to section 16 first, as amended, Shipping Act, 1916, from the Governors of the States of New York, New Jersey, and Philadelphia, alleging that the subject charges unjustly discriminate against the ports of New York² and Philadelphia and violate sections 15, 16 and 17 of the Shipping Act, 1916, section 205 of the Merchant Marine Act,

1936, and section 8 of the Merchant Marine Act, 1920.

In consideration of the foregoing the Commission is of the opinion that an investigation should be initiated to determine the lawfulness of the subject tariff rules and charges.

Now, therefore, it is ordered, That pursuant to sections 15 and 22 of the Shipping Act, 1916, an investigation shall be instituted to determine whether the Conferences' concerted action in publishing the subject rules and charges is in violation of section 205, Merchant Marine Act, 1936, and section 15, Shipping Act, 1916, by preventing carrier members of such Conferences from serving the ports of New York and Philadelphia at the same rates and charges which such carrier members charge at the nearest port already regularly served by them; whether the subject rules will subject the States of New York, New Jersey, and Pennsylvania and their products moving in foreign commerce, as well as cargo normally moving in foreign commerce via their ports, to undue and unreasonable prejudice in violation of section 16 of the Shipping Act, 1916; whether the subject rules will result in the assessment of charges that will be unjustly discriminatory and unfair as between the ports of New York and Philadelphia and other ports in violation of sections 15 and 17 of the Shipping Act, 1916; whether the subject charges at the ports of New York and Philadelphia will result in the establishment of unjust and unreasonable regulations and practices relating to the handling of property at such ports, moving in foreign commerce, in violation of section 17 of the Shipping Act, 1916; whether the subject charges will be unjustly discriminatory or unfair as between shippers, exporters and importers engaged in foreign commerce via the ports of New York and Philadelphia and shippers, exporters and importers engaged in foreign commerce via other ports, in violation of sections 15 and 17 of the Shipping Act, 1916; and whether the subject charges will divert cargo from the natural direction of its flow through the ports of New York and Philadelphia, in violation of section 8 of the Merchant Marine Act, 1920.

It is further ordered, That, pursuant to section 16, First of the Shipping Act, 1916, respondents are ordered to show cause why the subject rules and charges should not be set aside for the reasons enumerated above as advanced in the protests of the Governors of the States of New York, New Jersey, and Pennsylvania.

It is further ordered, That the Governors of the States of New York, New Jersey, and Pennsylvania are hereby named parties in this proceeding;

It is further ordered, That a public hearing be held before an examiner of the Commission's Office of Hearing Examiners at a date and place to be determined and announced by the Chief Examiner in accordance with this order to receive evidence in this proceeding to provide an adequate record for proper disposition of the issues; and

It is further ordered, That the hearing shall be commenced as soon as possible and the Examiner shall issue an initial decision at the earliest practicable date. Exceptions to the Examiner's initial decision shall be filed within 10 days following the date of service thereof with replies to exceptions to be filed within 10 days thereafter; and

It is further ordered, That notice of this order be published in the FEDERAL REGISTER and that a copy thereof and notice of hearing be served upon all parties; and

It is further ordered, That any person other than those named as parties herein who desires to become a party to this proceeding and participate therein, shall file a petition to intervene in accordance with Rule 5(1) (46 CFR 502.72) of the Commission's rules of practice and procedure; and

It is further ordered, That all future notices issued by or on behalf of the Commission in this proceeding, including notice of time and place of hearing or prehearing conference, shall be mailed directly to all parties of record.

By the Commission.

[SEAL] FRANCIS C. HURNEY,
Secretary.

APPENDIX A

- 2744 Atlantic and Gulf/West Coast of South America Conference—Mr. C. D. Marshall, Chairman, 11 Broadway, New York, NY 10004.
- 8300 Atlantic and Gulf/West Coast of Central America and Mexico Conference—Mr. C. D. Marshall, Chairman, 11 Broadway, New York, NY 10004.
- 7590 East Coast Colombia Conference—Mr. C. D. Marshall, Chairman, 11 Broadway, New York, NY 10004.
- 8120 U.S. Atlantic and Gulf—Haiti Conference—Mr. C. D. Marshall, Chairman, 11 Broadway, New York, NY 10004.
- 4610 U.S. Atlantic and Gulf—Jamaica Conference—Mr. C. D. Marshall, Chairman, 11 Broadway, New York, NY 10004.
- 7540 Leeward and Windward Islands and Guianas Conference—Mr. C. D. Marshall, Chairman, 11 Broadway, New York, NY 10004.
- 3868 Atlantic and Gulf/Panama Canal Zone, Colon and Panama City Conference—Mr. C. D. Marshall, Chairman, 11 Broadway, New York, NY 10004.
- 6080 U.S. Atlantic and Gulf—Santo Domingo Conference—Mr. C. D. Marshall, Chairman, 11 Broadway, New York, NY 10004.
- 6190 U.S. Atlantic and Gulf—Venezuela and Netherlands Antilles Conference—Mr. C. D. Marshall, Chairman, 11 Broadway, New York, NY 10004.
- 7890 West Coast South America North-bound Conference—Mr. C. D. Marshall, Chairman, 11 Broadway, New York, NY 10004.
- 3302 Association of West Coast Steamship Companies—Mr. E. Adema, Secretary, Post Office Box 5097, Cristobal, Canal Zone.
- Caribbean Trailer Express Ltd., Hamilton, Bermuda.
- Lykes Bros. Steamship Co., Inc., Post Office Box 53068, New Orleans, LA 70150.
- Azta Shipping Co. (Asta Line), c/o Industrias Azucareras, S.A., Post Office Box 3465, Avenida Francisco Miranda y Puente Tacoma, Caracas, Venezuela.
- Marine Mercante Nicaraguense, S.A. (Mamenic Line), Apartado Postal 805, Managua, Nicaragua, C.A.

* Review Board Member Berkemyer absent.

¹ Appendix B filed as part of original document.

² The Port of New York includes Marine Terminal facilities at Newark, Elizabeth, Hoboken and other points in New Jersey.

- Sea-Land Service, Inc.,¹ Terminal and Fleet Streets, Post Office Box 1050, Elizabeth, NJ 07207, and Gulf-Puerto Rico Lines, Inc.,¹ Post Office Box 51420, New Orleans, LA 70150.
- United Fruit Co. (a division of United Brands Co.), 1250 Broadway, New York, NY 10001.
- Atlantic Lines, Ltd., The Harris Building, 58 Shirley Street, Nassau, Bahamas.
- Booth Steamship Co., Ltd.,² Cunard Building, Liverpool 3, United Kingdom, and Lamport & Holt Line, Ltd.,² Royal Liver Building, Liverpool 3, United Kingdom.
- L. Figueiredo Navegacao, S.A., Rua Visc. do Rio Branco, 2-2" and Caixa Postal 13, Santos, Brazil.
- Linea Amazonica, S.A., Calle Pevas 219, Casilla 525, Iquitos, Peru.
- Pan American Mail Line, Inc., Apartado 4369, Panama 5, R.P.
- The Honduran Line (Empresa Hondurena de Vapores, S.A.), San Pedro Sula, Honduras.
- Hapag-Lloyd AG (Hapag/Lloyd Magellan Service), Gustav-Deetjen-Allee 2/6, 28 Bremen 1, Germany.
- Colombiana Internacional de Vapores, Apartado 17227, Bogota, Colombia.
- Compania Sud-Americana de Vapores (Chilean Line), Casilla 3207, Santiago, Chile.
- Flota Mercante Grancolombiana, S.A., Apartado Aereo 4482, Bogota, Colombia.
- Gulf & South American Steamship Company, Inc., Post Office Box 50938, New Orleans, LA 70150.
- Kawasaki Kisen Kaisha, Ltd. ("K" Line), 8, Kaigan-dori, Ikuta-Ku, Kobe, Japan.
- Nippon Yusen Kaisha Line (N.Y.K. Line), 3-2, Marunouchi, 2-Chome, Chiyoda-Ku, Tokyo 100, Japan.
- Prudential-Grace Lines, Inc., One Whitehall Street, New York, NY 10004.
- Vaasa Line Oy, Arkadiankatu 21, Helsinki, Finland.
- Westfal-Larsen & Co., A/S (Westfal-Larsen Line), Post Office Box 1192, Bergen, Norway.
- Compania Peruana de Vapores (Peruvian State Line), Camarra 676—Chucuito—Callao, Apartado 208, Callao, Peru.
- Alcoa Steamship Company, Inc., Two Pennsylvania Plaza, Suite 2880, New York, NY 10001.
- Compania Anonima Venezolana de Navegacion (Venezuelan Line), Ave. Urdaneta, Esq. Las Ibañas, Edif. Central, Caracas, Venezuela.
- Delta Steamship Lines, Inc., 1700 International Trade Mart, New Orleans, LA 70150.
- Koninklijke Nederlandsche Stoomboot Maatschappij, N.V. (Royal Netherlands Steamship Co.), Het Scheepvaarthuis, Prins Hendrikkade, 103-114 Amsterdam, Netherlands.
- Nopal Lines (The Northern Pan-America Line A/S), Post Office Box 27, Smestad, Oslo 3, Norway.

[FR Doc. 71-17250 Filed 11-24-71; 8:52 am]

[Docket No. 71-87]

ASSOCIATED LATIN AMERICAN FREIGHT CONFERENCES AND ASSOCIATION OF WEST COAST STEAMSHIP COMPANIES

Amended Tariff Rules Regarding Wharfage and Handling Charges; Order To Show Cause

The Associated Latin American Freight Conferences represents a group of 10

¹ Sea-Land joint service as one member only.

² Booth/Lamport joint service as one member only.

active conferences and the Association of West Coast Steamship Companies is a conference operating pursuant to Commission-approved agreements in trades between U.S. Atlantic and Gulf ports and ports in Central and South America and various neighboring islands. A list of these conferences and the member lines is attached as Appendix A below.

These conferences have revised their tariff rules regarding wharfage and handling charges so as to fix wharfage and handling charges and generally to shift the assessment of wharfage and handling charges at U.S. Atlantic and Gulf ports from carrier to cargo. These charges presently bear effective dates of November 15 and December 1, 1971. Appendix B attached¹ contains a typical specimen of the revised tariff rules as published by one of the subject conferences.

The publication of such tariff rules results in the assessment of charges by the conferences which vary in amount from port to port in the continental United States. The Commission has received protests pursuant to Section 16 First as amended, Shipping Act, 1916, from the Governors of the States of New York, Pennsylvania, and New Jersey alleging that the subject charges violate sections 15, 16, and 17 of the Shipping Act, 1916, section 205 of the Merchant Marine Act, 1936, and section 8 of the Merchant Marine Act, 1920. The Commission has also received informal complaints against these charges from the Maryland Port Administration, the Baltimore Marine Terminal Association, the Philadelphia Marine Terminal Association, and several shippers.

The publication of the subject tariff rules results in the assessment of charges by the conferences which vary in amount from port to port within the continental United States. In view of the Commission's recent decisions in Docket No. 70-11, "Pacific Coast European Conference—Rules 10 and 12, Tariff No. FMC 14," and Docket No. 70-18, "Sacramento-Yolo Port District vs. Pacific Coast European Conference, et al.," the Commission is of the opinion that section 205 of the Merchant Marine Act, 1936, forbids any conference from taking concerted action which results in the conference's assessing varying rates and charges among federally improved continental U.S. ports and, furthermore, prohibits the Commission from approving such action pursuant to section 15 of the Shipping Act, 1916.

Section 205 of the Merchant Marine Act, 1936, states:

Without limiting the power and authority otherwise vested in the Commission, it shall be unlawful for any common carrier by water, either directly or indirectly, through the medium of an agreement, conference, association, understanding, or otherwise, to prevent or attempt to prevent any other such carrier from serving any port designed for the accommodation of ocean-going vessels located on any improvement project authorized by the Congress or through it by

¹ Appendix B filed as part of the original document.

any other agency of the Federal Government, lying within the continental limits of the United States, at the same rates which it charges at the nearest port already regularly served by it.

As we held in Docket No. 70-11, "Pacific Coast European Conference—Rules 10 and 12, Tariff No. FMC 14," cited above, one of the purposes of this provision of law was "to prevent collective action designed to create discrimination in the form of a difference in rates at which federally-improved ports are served * * * multith opinion, page 24.

Now, therefore, it is ordered, Pursuant to sections 15 and 22 of the Shipping Act, 1916, and section 205, Merchant Marine Act, 1936, that the conferences and member lines as shown in Appendix A below be named respondents in this proceeding and that respondents be ordered to show cause why the Commission should not find the Conferences' concerted action in publishing the subject rules relating to wharfage and handling charges to be in violation of sections 205, Merchant Marine Act, 1936, and section 15, Shipping Act, 1916, and, accordingly, order such rules and charges stricken from the tariffs:

It is further ordered, That this proceeding shall be limited to the submission of affidavits and memoranda of law, replies, and oral argument. Should any party feel that an evidentiary hearing be required, that party must accompany any request for such hearing with a statement setting forth in detail the facts to be proven, their relevance to the issues in this proceeding, and why such proof cannot be submitted through affidavit. Requests for hearing shall be filed on or before November 30, 1971. Affidavits of fact and memoranda of law shall be filed by respondents and intervenors in support of respondents and served upon all parties no later than the close of business November 30, 1971. Reply affidavits and memoranda shall be filed by the Commission's Bureau of Hearing Counsel and intervenors in opposition to respondents, if any, no later than close of business December 8, 1971. Oral argument will be scheduled at a later date if requested and/or deemed necessary by the Commission.

It is further ordered, That a notice of this order be published in the FEDERAL REGISTER and that a copy thereof be served upon respondents:

It is further ordered, That persons other than those already party to this proceeding who desire to become parties to this proceeding and to participate therein shall file a petition to intervene pursuant to Rule 5(1) of the Commission's rules of practice and procedure (46 CFR 502.72) no later than close of business November 26, 1971;

It is further ordered, That all documents submitted by any party of record in this proceeding shall be directed to the Secretary, Federal Maritime Commission, Washington, D.C. 20573, in an original and 15 copies as well as being mailed directly to all parties of record.

By the Commission.

[SEAL]

FRANCIS C. HURNEY,
Secretary.

APPENDIX A

- 2744 Atlantic & Gulf/West Coast of South America Conference—Mr. C. D. Marshall, Chairman, 11 Broadway, New York, NY 10004.
- 3300 Atlantic and Gulf/West Coast of Central America and Mexico Conference—Mr. C. D. Marshall, Chairman, 11 Broadway, New York, NY 10004.
- 7590 East Coast Colombia Conference—Mr. C. D. Marshall, Chairman, 11 Broadway, New York, NY 10004.
- 8120 United States Atlantic and Gulf-Haiti Conference—Mr. C. D. Marshall, Chairman, 11 Broadway, New York, NY 10004.
- 4410 U.S. Atlantic and Gulf—Jamaica Conference—Mr. C. D. Marshall, Chairman, 11 Broadway, New York, NY 10004.
- 7540 Leeward & Windward Islands & Guianas Conference—Mr. C. D. Marshall, Chairman, 11 Broadway, New York, NY 10004.
- 3368 Atlantic and Gulf/Panama Canal Zone, Colon and Panama City Conference—Mr. C. D. Marshall, Chairman, 11 Broadway, New York, NY 10004.
- 6080 United States Atlantic and Gulf Santo Domingo Conference—Mr. C. D. Marshall, Chairman, 11 Broadway, New York, NY 10004.
- 6190 United States Atlantic & Gulf—Venezuela and Netherlands Antilles Conference—Mr. C. D. Marshall, Chairman, 11 Broadway, New York, NY 10004.
- 7890 West Coast South America Northbound Conference—Mr. C. D. Marshall, Chairman, 11 Broadway, New York, NY 10004.
- 3302 Association of West Coast Steamship Companies—Mr. E. Adema, Secretary, Post Office Box 5097, Cristobal, C.Z.
- Caribbean Trailer Express, Ltd., Hamilton, Bermuda.
- Lykes Bros. Steamship Co., Inc., Post Office Box 53068, New Orleans, LA 70150.
- Arta Shipping Co. (Azta Line), c/o Industrias Azucareras, S.A., Post Office Box 3465, Avenida Francisco Miranda y Puente Tacome, Caracas, Venezuela.
- Marine Mercante Nicaraguense, S.A. (Mamenic Line), Apartado Postal 805, Managua, Nicaragua, C.A.
- Sea-Land Service, Inc., Terminal and Fleet Streets, Post Office Box 1050, Elizabeth, N.J. 07207, and Gulf-Puerto Rico Lines, Inc., Post Office Box 51420, New Orleans, LA 70150.
- United Fruit Co. (a division of United Brands Co.), 1250 Broadway, New York, NY 10001.
- Atlantic Lines, Ltd., The Harris Building, 58 Shriley Street, Nassau, Bahamas.
- Booth Steamship Co., Ltd., Cunard Building, Liverpool 3, United Kingdom, and Lamport & Holt Line Ltd., Royal Liver Building, Liverpool 3, United Kingdom.
- L. Figueiredo Navegacao S.A., Rua Visc. do Rio Branco, 2-2 and Caixa Postal 13, Santos, Brazil.
- Linea Amazonica S.A., Calle Pevas 219, Casilla 525, Iquitos, Peru.
- Pan American Mail Line, Inc., Apartado 4369, Panama 5, R.P.
- The Honduran Line (Empresa Hondurena de Vapores, S.A.), San Pedro Sula, Honduras.
- Hapag-Lloyd AG (Hapag-Lloyd Magellan Service), Gustav-Deetjen-Allee 2/6, 28 Bremen 1, Germany.
- Colombiana Internacional de Vapores, Apartado 17227, Bogota, Colombia.

¹ Sea-Land Joint Service as one member only.

² Booth/Lamport Joint Service as one member only.

- Compania Sud-Americana de Vapores (Chilean Line), Casilla 3207, Santiago, Chile.
- Flota Mercante Grancolombiana, S.A., Apartado Aereo 4482, Bogota, Colombia.
- Gulf & South American Steamship Company, Inc., Post Office Box 50938, New Orleans, LA 70150.
- Kawasaki Kisen Kaisha, Ltd. ("K" Line), 8, Kaigan-dori, Ikuta-Ku, Kobe, Japan.
- Nippon Yusen Kaisha Line (N.Y.K. Line), 3-2, Marunouchi, 2-Chome, Chiyoda-Ku, Tokyo 100, Japan.
- Prudential-Grace Lines, Inc., 1 Whitehall St., New York, NY 10004.
- Vaasa Line Oy, Arkadiankatu 21, Helsinki, Finland.
- Westfal-Larsen & Co., A/S (Westfal-Larsen Line), Post Office Box 1192, Bergen, Norway.
- Compania Peruana de Vapores (Peruvian State Line), Camarra 676—Chucuito—Callao, Apartado 208, Callao, Peru.
- Alcoa Steamship Company, Inc., 2 Pennsylvania Plaza, Suite 2880, New York, NY 10001.
- Compania Anonima Venezolana de Navegacion (Venezuelan Line), Ave. Urdaneta, Esq. Las Ibaues, Edif. Central, Caracas, Venezuela.
- Delta Steamship Lines, Inc., 1700 International Trade Mart, New Orleans, LA 70150.
- Koninklijke Nederlandsche Stoomboot Maatschappij N.V. (Royal Netherlands Steamship Co.), Het Scheepvaarthuis, Prins Hendrikkade, 106-114 Amsterdam, Netherlands.
- Nopal Lines (The Northern Pan-America A/S), Post Office Box 27, Smestad, Oslo 3, Norway.

[FR Doc. 71-17251 Filed 11-24-71; 8:52 am.]

[Docket No. 71-79]

PUERTO RICAN FORWARDING CO., INC.

General Increases in Rates in the U.S. Atlantic and Puerto Rico Trade; Amendment of Order of Suspension and Investigation

On August 20, 1971, the Commission issued an Order of Investigation and Suspension which suspended proposed increases to Tariff FMC-F No. 3 by Puerto Rican Forwarding Co., Inc. (PRF) for a 4-month period commencing on August 25, 1971, and terminating on December 25, 1971. By the same order, an investigation into the lawfulness of the increased rates was instituted.

One of the cost factors which PRF had submitted to the Commission as justification for its proposed increase in rates was the 18 percent cost increase in the purchase of transportation from its underlying water carriers. The latter increases had been suspended by Commission Order until August 25, 1971; they have since been "frozen" until November 13, 1971, by the Commission's circular letter of August 18, 1971.

On November 2, 1971, PRF filed a Motion To Amend the Order of Suspension and Investigation, in which it moved that the Commission's order served August 20,

¹ The rates were "frozen" under Executive Order 11615, Economic Stabilization Act, 1970, as amended by Executive Order 11627.

1971, be modified to provide that the suspension period run concurrently with the suspension period of the increased rates of Sea-Land Service, Inc., which was to expire on November 13, 1971.

PRF claims that it voluntarily suspended the effective date of its tariff increases from March 26, 1971, first to mid-June and then to August 26, 1971, at which time the Commission-imposed suspension took effect. During the 8 months since the increases were initially proposed, various audits and inspections of PRF's records have been made by the Commission.

PRF further argues that if the underlying carriers' rate increases go into effect on November 13, and PRF's rates remain suspended, PRF will cease to function in an economically viable manner. PRF states that it is presently "losing money" and that no investigation or audit by the Commission's staff has proven otherwise. PRF contends that no standard of reasonableness has ever been announced by the Commission in analyzing NVOCC rates.

Finally, PRF emphasizes that it has cooperated to the fullest extent with the Commission in the investigation of its proposed rate increases. It concludes that "no purpose can be served in creating discrimination by suspending PRF's rates beyond the period the underlying carrier's rates are suspended." Hearing Counsel, relying on the facts cited by PRF in its Motion To Amend, have joined with PRF in requesting that the Commission's Order be amended to allow the suspension period to run concurrently with the suspension period of the increased rates of Sea-Land Service, Inc., the major underlying carrier.

For the reasons cited by PRF, and especially in light of the fact that it has cooperated fully with the Commission in its investigation of the proposed increases, and had voluntarily postponed its increases for some 4 months prior to the issuance of the Order of Suspension, we conclude that the motion should be granted. By so granting this motion, the Commission is in no way expressing any conclusions with respect to the continuing investigation of the subject rate increases.

Therefore, it is ordered, That the Commission's Order of Investigation and Suspension, dated August 20, 1971, is hereby amended to provide that Supplements Nos. 8, 9, 10, and 11 to Tariff FMC-F No. 3 are suspended and the use thereof deferred to and including November 13, 1971.

It is further ordered, That while the above amendment is authorized for filing, any proposed rate increase cannot become effective until approved by the Federal Maritime Commission, pursuant to 6 CFR 300.016.

By the Commission.

[SEAL] FRANCIS C. HURNEY,
Secretary.

[FR Doc. 71-17252 Filed 11-24-71; 8:52 am.]

**MEMBERS OF THE TRANS-PACIFIC
FREIGHT CONFERENCE OF HONG
KONG AND MEMBERS OF NEW
YORK FREIGHT BUREAU**

Notice of Agreement Filed

Notice is hereby given that the following agreement has been filed with the Commission for approval pursuant to section 15 of the Shipping Act, 1916, as amended (39 Stat. 733, 75 Stat. 763, 46 U.S.C. 814).

Interested parties may inspect and obtain a copy of the agreement at the Washington office of the Federal Maritime Commission, 1405 I Street NW., Room 1015; or may inspect the agreement at the Field Offices located at New York, N.Y., New Orleans, La., and San Francisco, Calif. Comments on such agreements, including requests for hearing, may be submitted to the Secretary, Federal Maritime Commission, Washington, D.C., 20573, within 20 days after publication of this notice in the FEDERAL REGISTER. Any person desiring a hearing on the proposed agreement shall provide a clear and concise statement of the matters upon which they desire to adduce evidence. An allegation of discrimination or unfairness shall be accompanied by a statement describing the discrimination or unfairness with particularity. If a violation of the Act or detriment to the commerce of the United States is alleged, the statement shall set forth with particularity the acts and circumstances said to constitute such violation or detriment to commerce.

A copy of any such statement should also be forwarded to the party filing the agreement (as indicated hereinafter) and the statement should indicate that this has been done.

Notice of agreement filed by:

Charles F. Warren, Esq., 1100 Connecticut Avenue NW., Washington, DC 20036.

Agreement No. 9970 is a Cooperative Working Agreement between member lines of the Trans-Pacific Freight Conference of Hong Kong (Agreement No. 14, as amended) and the members of the New York Freight Bureau (Agreement No. 5700, as amended), which permits " * * * joint meetings which shall be held at the Owners level, the lines may meet together, discuss and agree upon rates to be charged, rules in implementation thereof, and all other matters of mutual interest within the scope of activities permitted under their approved Agreements 14 and 5700, both as amended, and joint action taken hereunder shall be determined only by a concurrence of the [Agreement 14 lines] acting as a group, and of the [Agreement 5700 lines] acting as a group, each in accordance with the procedures, quorums, and votes prescribed by its representative Conference Agreement."

Dated: November 19, 1971.

By order of the Federal Maritime Commission.

FRANCIS C. HURNEY,
Secretary.

[FR Doc.71-17254 Filed 11-24-71; 8:52 am]

**THAILAND/U.S. ATLANTIC AND GULF
CONFERENCE**

Notice of Agreement Filed

Notice is hereby given that the following agreement has been filed with the Commission for approval pursuant to section 15 of the Shipping Act, 1916, as amended (39 Stat. 733, 75 Stat. 763, 46 U.S.C. 814).

Interested parties may inspect and obtain a copy of the agreement at the Washington office of the Federal Maritime Commission, 1405 I Street NW., Room 1015; or may inspect the agreement at the Field Offices located at New York, N.Y., New Orleans, La., and San Francisco, Calif. Comments on such agreements, including requests for hearing, may be submitted to the Secretary, Federal Maritime Commission, Washington, D.C. 20573, within 20 days after publication of this notice in the FEDERAL REGISTER. Any person desiring a hearing on the proposed agreement shall provide a clear and concise statement of the matters upon which they desire to adduce evidence. An allegation of discrimination or unfairness shall be accompanied by a statement describing the discrimination or unfairness with particularity. If a violation of the Act or detriment to the commerce of the United States is alleged, the statement shall set forth with particularity the acts and circumstances said to constitute such violation or detriment to commerce.

A copy of any such statement should also be forwarded to the party filing the agreement (as indicated hereinafter) and the statement should indicate that this has been done.

Notice of agreement filed by:

S. S. Marr, Thailand/U.S. Atlantic & Gulf Conference, c/o The Borneo Co., Ltd., 1/1041 Silom Road, Bangkok, Thailand.

Agreement No. 8100-8 modifies the Thailand/U.S. Atlantic & Gulf Conference's basic agreement by deleting section 17 which requires all conference lines to utilize the New York Lines Agency as their agent in "South Siam."

Dated: November 19, 1971.

By order of the Federal Maritime Commission.

FRANCIS C. HURNEY,
Secretary.

[FR Doc.71-17253 Filed 11-24-71; 8:52 am]

FEDERAL POWER COMMISSION

[Docket No. RP72-68]

BACA GAS GATHERING SYSTEM, INC.

**Notice of Proposed Changes in
Rates and Charges**

NOVEMBER 16, 1971.

Take notice that on November 9, 1971, Baca Gas Gathering System, Inc. (Baca), tendered for filing a proposed change in its FPC Gas Tariff, Original Volume No. 1, to become effective on December 1, 1971, or on such later date as the proposed increased rate is approved. The tender, Original Sheet No. 3-B, would

increase the rate from 17 cents per Mcf to 18.6 cents, under its amended Rate Schedule No. 1, to Panhandle Eastern Pipe Line Co. (Panhandle), the sole jurisdictional customer involved. Based on the remaining gas supply on June 30, 1971, the proposed change would increase jurisdictional revenues by approximately \$163,951. Baca states that the reason for the proposed rate increase is to enable it to meet its mortgage debt obligations.

Any person desiring to be heard or to make any protest with reference to said application should on or before November 24, 1971, file with the Federal Power Commission, Washington, D.C. 20426, petitions to intervene or protests in accordance with the requirements of the Commission's rules of practice and procedure (18 CFR 1.8 or 1.10). All protests filed with the Commission will be considered by it in determining the appropriate action to be taken but will not serve to make the protestants parties to the proceeding. Persons wishing to become parties to a proceeding or to participate as a party in any hearing therein must file petitions to intervene in accordance with the Commission's rules. The application is on file with the Commission and available for public inspection.

Any order issued in this proceeding is subject to our Statement of Policy Implementing the Economic Stabilization Act of 1970 (Public Law 91-379, 84 Stat. 799, as amended by Public Law 92-15, 85 Stat. 38) and Executive Order No. 11615, including such amendments as the Commission may require.

KENNETH F. PLUMB,
Secretary.

[FR Doc.71-17228 Filed 11-24-71; 8:49 am]

[Dockets Nos. RP71-106, RP71-129]

CITIES SERVICE GAS CO.

**Notice of Filing of Stipulation and
Agreement**

NOVEMBER 16, 1971.

Take notice that on November 9, 1971, Cities Service Gas Co. (Cities Service) filed a request for approval of a proposed stipulation and agreement in the above-entitled proceedings. The stipulation and agreement is a result of discussions among Cities Service, the Commission Staff, and interested parties in those proceedings. It resolves all issues therein with the exception of the issue of normalization of liberalized tax depreciation for ratemaking purposes and Cities Service's curtailment policies and procedures as expressed in Article 13, "Priority of Service," of the general terms and conditions of its FPC gas tariff.

The stipulation and agreement and accompanying tariff sheets provide for rates which produce an increase in Cities Service's test period jurisdictional revenues of approximately \$8,000,583 above the revenues produced by the rates in effect at the time of Cities Service's filing in Docket No. RP71-106. The stipulation and agreement further provides, among other things, that Cities Service may adjust its rates to reflect further changes in the company's purchased gas costs,

expenditures for advance payments, and changes in Federal income tax rates. Cities Service agrees not to file for a general increase in its jurisdictional rates prior to July 21, 1972, except to reflect during that moratorium period (1) the placing in service of construction projects that would increase the availability of gas supplies to Cities Service's system and capitalized expenditures made to comply with the Natural Gas Pipeline Safety Act of 1968 and the Occupational Safety and Health Act of 1970 and rules, regulations and standards thereunder, with aggregate cost for such construction projects and capitalized expenditures of at least \$8 million, and (2) any payments eventually made by Cities Service to Western Natural Gas Co. pursuant to a final and nonappealable judgment or settlement of the issues if such judgment or settlement arises out of the latter company's suit in The District Court, Oklahoma County, Okla., Case No. 175,435. The stipulation and agreement provides for the refund with interest, for the period October 23, 1971, to the date on which Cities Service is permitted to charge and collect the rates provided in the stipulation and agreement, of the difference between any amounts billed and collected by Cities Service in excess of the amounts calculated on the basis of the rates reflected in the stipulation and agreement.

Copies of the stipulation and agreement were served upon all parties to the above-captioned proceedings; and the accompanying tariff sheets, upon all of Cities Service's jurisdictional customers, interested State commissions, and parties to these proceedings.

Comments with respect to the proposed stipulation and agreement may be filed with the Federal Power Commission, Washington, D.C. 20426, on or before December 13, 1971.

Any order issued in these proceedings is subject to the Commission's Statement of Policy Implementing the Economic Stabilization Act of 1970 (Public Law 91-379, 84 Stat. 799, as amended by Public Law 92-15, 85 Stat. 38) and Executive Order No. 11615, including such amendments as the Commission may require.

KENNETH F. PLUMB,
Secretary.

[PR Doc.71-17229 Filed 11-24-71;8:50 am]

[Docket No. E-7630]

METROPOLITAN EDISON CO.

Notice of Further Extension of Time

NOVEMBER 17, 1971.

On November 11, 1971, the Borough of Kutztown filed a request for a further extension of time within which to file testimony and exhibits, pursuant to paragraph (C) of the order issued June 29, 1971, in the above-designated matter. On November 15, 1971, Metropolitan Edison Co. (Met-Ed) filed an answer opposing the requested extension of time. Met-Ed requests that if the extension of time is granted that the time for filing rebuttal testimony be extended to and including

December 17, 1971, and that the hearing be further postponed until January 3, 1972.

Upon consideration, notice is hereby given that the time is further extended to and including November 29, 1971, within which the Borough of Kutztown shall file its testimony and exhibits in the above-designated matter. The time is further extended to and including December 17, 1971, within which rebuttal evidence shall be filed by Met-Ed, and the hearing is further postponed, to commence on January 4, 1972, at 10 a.m., e.s.t., in a hearing room of the Federal Power Commission, 441 G Street NW., Washington, DC 20426.

KENNETH F. PLUMB,
Secretary.

[PR Doc.71-17230 Filed 11-24-71;8:50 am]

[Docket No. CP68-249]

MIDWESTERN GAS TRANSMISSION CO.

Notice of Petition To Amend

NOVEMBER 16, 1971.

Take notice that on November 3, 1971, Midwestern Gas Transmission Co. (petitioner), Chamber of Commerce Building, Houston, Tex. 77002, filed in Docket No. CP68-249 a petition to amend the order of the Commission issued pursuant to section 7(c) of the Natural Gas Act on May 24, 1968 (39 FPC 862), as amended, in said docket by authorizing the modification and operation of a gas turbine compressor unit located at its Station No. 2105 near Beaver Dam, Ky., all as more fully set forth in the petition to amend which is on file with the Commission and open to public inspection.

The order of May 24, 1968, as amended, authorized, inter alia, the construction and operation of certain facilities by Petitioner for the receipt of a maximum daily volume of 600,780 Mcf of natural gas from Tennessee Gas Pipeline Co., a division of Tenneco Inc. (Tennessee), at two delivery points, one near Portland, Tenn., and the other at the interconnection between the systems of Trunkline Gas Co. (Trunkline) and petitioner near Potomac, Ill.

Petitioner states that deliveries of natural gas by Trunkline, for the account of Tennessee, at the Potomac delivery point will be phased out effective November 1, 1972. To provide the system capacity necessary to accept delivery of the entire quantity of natural gas at the Portland delivery point, Petitioner proposes to modify the existing gas turbine compressor unit at its Station No. 2105. This modification, at a cost of \$194,790, is expected to add approximately 4,550 horsepower of compression to petitioner's system.

Any person desiring to be heard or to make any protest with reference to said petition to amend should on or before December 6, 1971, file with the Federal Power Commission, Washington, D.C. 20426, a petition to intervene or a protest in accordance with the requirements of the Commission's rules of practice and

procedure (18 CFR 1.8 or 1.10) and the regulations under the Natural Gas Act (18 CFR 157.10). All protests filed with the Commission will be considered by it in determining the appropriate action to be taken but will not serve to make the protestants parties to the proceeding. Any person wishing to become a party to a proceeding or to participate as a party in any hearing therein must file a petition to intervene in accordance with the Commission's rules.

KENNETH F. PLUMB,
Secretary.

[PR Doc.71-17231 Filed 11-24-71;8:50 am]

[Docket No. CP72-117]

TEXAS GAS PIPE LINE CORP.

Notice of Application

NOVEMBER 16, 1971.

Take notice that on November 2, 1971, Texas Gas Pipe Line Corp. (applicant), Post Office Box 2120, Houston, TX 77001, filed in Docket No. CP72-117 an application pursuant to section 7(b) of the Natural Gas Act for permission for and approval of the abandonment of certain natural gas facilities, and pursuant to section 7(c) of the Natural Gas Act for a certificate of public convenience and necessity authorizing the exchange of natural gas with Texas Eastern Transmission Corp. (Texas Eastern), all as more fully set forth in the application which is on file with the Commission and open to public inspection.

Applicant states that the U.S. Army Corps of Engineers has requested that applicant's pipeline crossing of the Neches River in Jefferson County, Tex., be removed and relocated to facilitate the improvement of the river's channel. Applicant states that the cost of relocating this pipeline is prohibitive considering the volume of gas transported through the facilities for sale to Transcontinental Gas Pipe Line Corp. (Transco), and the reserves which support the sale. Therefore, applicant proposes to abandon and salvage this river crossing at an estimated cost of \$25,286.

To provide for the continued sale and delivery of natural gas to Transco, applicant proposes to exchange natural gas with Texas Eastern. Specifically, applicant proposes to deliver up to 20,000 Mcf of natural gas per day to Texas Eastern at an interconnection between their facilities in Jefferson County, Texas. Texas Eastern will redeliver equivalent volumes to applicant at an interconnection between their facilities in Orange County, Tex.

Any person desiring to be heard or to make any protest with reference to said application should on or before December 6, 1971, file with the Federal Power Commission, Washington, D.C. 20426, a petition to intervene or a protest in accordance with the requirements of the Commission's rules of practice and procedure (18 CFR 1.8 or 1.10) and the regulations under the Natural Gas Act (18 CFR 157.10). All protests filed with the Commission will be considered by it in

determining the appropriate action to be taken but will not serve to make the protestants parties to the proceeding. Any person wishing to become a party to a proceeding or to participate as a party in any hearing therein must file a petition to intervene in accordance with the Commission's rules.

Take further notice that, pursuant to the authority contained in and subject to the jurisdiction conferred upon the Federal Power Commission by sections 7 and 15 of the Natural Gas Act and the Commission's rules of practice and procedure, a hearing will be held without further notice before the Commission on this application if no petition to intervene is filed within the time required herein, if the Commission on its own review of the matter finds that a grant of the certificate and permission and approval for the proposed abandonment are required by the public convenience and necessity. If a petition for leave to intervene is timely filed, or if the Commission on its own motion believes that a formal hearing is required, further notice of such hearing will be duly given.

Under the procedure herein provided for, unless otherwise advised, it will be unnecessary for applicant to appear or be represented at the hearing.

KENNETH F. PLUMS,
Secretary.

[FR Doc.71-17232 Filed 11-24-71;8:50 am]

[Docket No. CP72-91]

EL PASO NATURAL GAS CO.

Notice of Application; Correction

NOVEMBER 12, 1971.

In the notice of application, issued October 22, 1971, and published in the FEDERAL REGISTER October 30, 1971, 36 F.R. 20911, change "CP72-92" to "CP72-91".

KENNETH F. PLUMS,
Secretary.

[FR Doc.71-17234 Filed 11-24-71;8:50 am]

[Docket No. CI71-136]

MONSANTO CO. ET AL.

Notice of Application; Correction

SEPTEMBER 21, 1971.

In the notice of application, issued September 13, 1971 and published in the FEDERAL REGISTER September 15, 1971, 36 F.R. 18487, heading and first paragraph: Change Docket No. CI71-136 to Docket No. CI72-136.

KENNETH F. PLUMS,
Secretary.

[FR Doc.71-17235 Filed 11-24-71;8:50 am]

[Docket No. CP71-299]

GREAT LAKES GAS TRANSMISSION

Notice of Supplement to Application; Correction

AUGUST 17, 1971.

In the notice of supplement to application, issued July 2, 1971, and published

in the FEDERAL REGISTER July 24, 1971, 36 F.R. 13817: First paragraph delete "2.6¢" and substitute "2.9¢".

KENNETH F. PLUMS,
Secretary.

[FR Doc.71-17236 Filed 11-24-71;8:50 am]

[Docket No. RI71-809]

TEXACO, INC., ET AL.

Order Providing for Hearing on and Suspension of Proposed Changes in Rates, and Allowing Rate Changes To Become Effective Subject to Refund; Correction

AUGUST 4, 1971.

In the order providing for hearing on and suspension of proposed changes in rates, and allowing rate changes to become effective subject to refund, issued March 10, 1971, and published in the FEDERAL REGISTER March 20, 1971, 36 F.R. 5381: Appendix "A" Docket No. RI71-819, Pennzoil United, Inc., et al. Under column headed "Supp. No." change "7" to "8". Under column headed "Rate in Effect" change "16.0" to "16.06".

KENNETH F. PLUMS,
Secretary.

[FR Doc.71-17237 Filed 11-24-71;8:50 am]

[Dockets Nos. RI71-970, CI71-788]

WARREN PETROLEUM CORP. AND SUN OIL CO.

Order Setting Date for Formal Hearing, Consolidating Proceedings, Prescribing Procedures, Permitting Intervention and Directing the Filing of an Application; Correction

SEPTEMBER 30, 1971.

In the order setting date for formal hearing, consolidating proceedings, prescribing procedures, permitting intervention and directing the filing of an application to abandon pursuant to section 7(b) of the Natural Gas Act, issued September 9, 1971, and published in the FEDERAL REGISTER September 18, 1971, 36 F.R. 18685: In the above-referenced order change "Cities Service Gas Co." to "Cities Service Oil Co".

KENNETH F. PLUMS,
Secretary.

[FR Doc.71-17238 Filed 11-24-71;8:50 am]

FEDERAL RESERVE SYSTEM

NORTH ATLANTIC BANCORP.

Notice of Application for Approval of Acquisition of Shares of Bank

Notice is hereby given that application has been made, pursuant to section 3(a)(3) of the Bank Holding Company Act of 1956 (12 U.S.C. 1842(a)(3)), by North Atlantic Bancorp., which is a bank holding company located in Newton, Mass., for prior approval by the Board of Gov-

ernors of the acquisition by Applicant of 51 percent or more of the voting shares of University Trust Co., Cambridge, Mass.

Section 3(c) of the Act provides that the Board shall not approve:

(1) Any acquisition or merger or consolidation under section 3 which would result in a monopoly, or which would be in furtherance of any combination or conspiracy to monopolize or to attempt to monopolize the business of banking in any part of the United States, or

(2) Any other proposed acquisition or merger or consolidation under section 3 whose effect in any section of the country may be substantially to lessen competition, or to tend to create a monopoly, or which in any other manner would be in restraint of trade, unless the Board finds that the anticompetitive effects of the proposed transaction are clearly outweighed in the public interest by the probable effect of the transaction in meeting the convenience and needs of the community to be served.

Section 3(c) further provides that, in every case, the Board shall take into consideration the financial and managerial resources and future prospects of the company or companies and the banks concerned, and the convenience and needs of the community to be served.

Not later than thirty (30) days after the publication of this notice in the FEDERAL REGISTER, comments and views regarding the proposed acquisition may be filed with the Board. Communications should be addressed to the Secretary, Board of Governors of the Federal Reserve System, Washington, D.C. 20551. The application may be inspected at the office of the Board of Governors or the Federal Reserve Bank of Boston.

Board of Governors of the Federal Reserve System, November 19, 1971.

[SEAL]

TYNAN SMITH,
Secretary of the Board.

[FR Doc.71-17212 Filed 11-24-71;8:49 am]

VIRGINIA COMMONWEALTH BANKSHARES, INC.

Order Approving Acquisition of Bank Stock By Bank Holding Company

In the matter of the application of Virginia Commonwealth Bankshares, Inc., Richmond, Va., for approval of acquisition of 100 percent of the voting shares of the successor by merger to Bank of Warren, Front Royal, Va.

There has come before the Board of Governors, pursuant to section 3(a)(3) of the Bank Holding Company Act of 1956 (12 U.S.C. 1842(a)(3)) and § 222.3(a) of Federal Reserve Regulation Y (12 CFR 222.3(a)), an application by Virginia Commonwealth Bankshares, Inc., Richmond, Va., a registered bank holding company, for the Board's prior approval of the acquisition of 100 percent of the voting shares of the successor by merger to Bank of Warren (Bank), Front Royal, Va. The bank into which Bank is to be merged has no significance except as a means of acquiring all of the shares of Bank. Accordingly, the

proposed acquisition of the shares of the successor organization is treated herein as the proposed acquisition of the shares of Bank.

As required by section 3(b) of the Act, the Board gave written notice of receipt of the application to the Virginia Commissioner of Banking and requested his views and recommendation. The Commissioner recommended approval of the application.

Notice of receipt of the application was published in the FEDERAL REGISTER on September 22, 1971 (36 F.R. 18817), providing an opportunity for interested persons to submit comments and views with respect to the proposal. A copy of the application was forwarded to the U.S. Department of Justice for its consideration. Time for filing comments and views has expired and all those received have been considered.

The Board has considered the application in the light of the factors set forth in section 3(c) of the Act, including the effect of the proposed acquisition on competition, the financial and managerial resources and future prospects of the applicant and the banks concerned, and the convenience and needs of the communities to be served, and finds that:

Applicant, the fourth largest banking organization in Virginia, controls 15 banks which hold combined deposits of approximately \$674.5 million, representing 8.4 percent of the total commercial banks deposits held by Virginia banks. (All banking data are as of December 31, 1970, adjusted to reflect holding company formations and acquisitions through September 30, 1971.) The acquisition of Bank (\$13.8 million deposits) would increase applicant's share of deposits in the State by only 0.2 percentage point, representing no significant increase in Applicant's control of deposits in the State, or change in its present ranking. In a separate application filed concurrently with the instant matter, applicant proposes to acquire the successor by merger to the Bank of Whaleyville, Inc., Whaleyville, Va. Affiliation of both banks would increase applicant's share of the total commercial bank deposits in Virginia to 8.6 percent and would not, therefore, have any significant effect on the concentration of banking resources in Virginia or on applicant's Statewide competitive position.

Bank operates its main office and a single branch in the town of Front Royal. Deposits in Warren County (Bank's relevant market) are almost equally divided between Bank and a competing bank which operates three branch offices in Front Royal. However, the competing bank, headquartered in Winchester, 16 miles north of Front Royal, has total deposits five times greater than that of Bank. Thus, the proposed affiliation of Bank with applicant could serve to enhance competition in Warren County in view of the present disparity in the competitive strength of the two institutions.

Applicant's subsidiary office closest to Bank is located 37 miles east of Front Royal, and apparently no significant present competition exists between Bank and this office, or any of applicant's other offices. It appears that consumma-

tion of this proposal would not foreclose significant potential competition in the light of the facts of record, notably, the distances involved, the restrictive branching laws in the State of Virginia, and the unlikelihood that applicant would enter Bank's market de novo. Based on the foregoing, and the record before it, the Board concludes that consummation of the proposed acquisition would not have an adverse effect on competition in any relevant market.

Considerations related to financial condition, management, and prospects, as they relate to applicant, its subsidiaries, and Bank are regarded as satisfactory and consistent with approval of the application. It is noted that applicant has made a public offering of common stock. Considerations relating to the convenience and needs of the area lend some weight toward approval. Although the more important banking needs of the area are being served at the present time, applicant plans to assist Bank to strengthen its retail business as well as to add other services to create a full-service bank. Operating economies of scale and access to the specialized talents of the holding company are regarded as likely to benefit Bank and facilitate its serving the needs of the community. It is the Board's judgment that consummation of the proposed transaction would be in the public interest, and that the application should be approved.

It is hereby ordered, On the basis of the record, that said application be and hereby is approved for the reasons summarized above: *Provided*, That the action so approved shall not be consummated (a) before the 30th calendar day following the date of this order or (b) later than 3 months after the date of this order, unless such period is extended for good cause by the Board or by the Federal Reserve Bank of Richmond pursuant to delegated authority.

By order of the Board of Governors,
November 18, 1971.

[SEAL]

TYNAN SMITH,
Secretary of the Board.

[FR Doc.71-17203 Filed 11-24-71;8:48 am]

VIRGINIA COMMONWEALTH BANKSHARES, INC.

Order Approving Acquisition of Bank Stock By Bank Holding Company

In the matter of the application of Virginia Commonwealth Bankshares, Inc., Richmond, Va., for approval of acquisition of 100 percent of the voting shares of the successor by merger to Bank of Whaleyville, Inc., Whaleyville, Va.

There has come before the Board of Governors, pursuant to section 3(a)(3) of the Bank Holding Company Act of 1956 (12 U.S.C. 1842(a)(3)) and § 222.3(a) of Federal Reserve Regulation Y (12 CFR 222.3(a)), an application by

¹ Voting for this action: Chairman Burns and Governors Robertson, Daane, and Maisel. Absent and not voting: Governors Mitchell, Brimmer, and Sherrill.

Virginia Commonwealth Bankshares, Inc., Richmond, Va., a registered bank holding company, for the Board's prior approval of the acquisition of 100 percent of the voting shares of the successor by merger to Bank of Whaleyville, Incorporated (Bank), Whaleyville, Va. The bank into which Bank is to be merged has no significance except as a means of acquiring all of the shares of Bank. Accordingly, the proposed acquisition of the shares of the successor organization is treated herein as the proposed acquisition of the shares of Bank.

As required by section 3(b) of the Act, the Board gave written notice of receipt of the application to the Virginia Commissioner of Banking and requested his views and recommendation. The Commissioner recommended approval of the application.

Notice of receipt of the application was published in the FEDERAL REGISTER on September 22, 1971 (36 F.R. 18817), providing an opportunity for interested persons to submit comments and views with respect to the proposal. A copy of the application was forwarded to the U.S. Department of Justice for its consideration. Time for filing comments and views has expired and all those received have been considered.

The Board has considered the application in the light of the factors set forth in section 3(c) of the Act, including the effect of the proposed acquisition on competition, the financial and managerial resources and future prospects of applicant and the banks concerned, and the convenience and needs of the communities to be served, and finds that:

Applicant, the fourth largest banking organization in Virginia, controls 15 banks which hold combined deposits of approximately \$674.5 million, representing 8.4 percent of the total commercial bank deposits held by Virginia banks. (All banking data are as of December 31, 1970, adjusted to reflect holding company formations and acquisitions through September 30, 1971.) The acquisition of Bank (\$4.2 million deposits), would increase applicant's share of commercial bank deposits in the State by an insignificant amount. In a separate application filed concurrently with the instant matter, applicant proposes to acquire the successor by merger to the Bank of Warren, Front Royal, Va. Affiliation of both banks would increase applicant's share of the total commercial bank deposits in Virginia to 8.6 percent and would not, therefore, have any significant effect on the concentration of banking resources in Virginia or on applicant's Statewide competitive position.

Bank operates its single office in the town of Whaleyville (population 332), and serves the surrounding rural area within a radius of about 10 miles. With but 5.9 percent of total deposits in the Whaleyville banking market (approximated by the southern part of Nansemond County including the independent city of Suffolk), Bank is the smallest of five banking organizations in the area. Competing in this market are two bank holding companies and the State's second largest bank. Applicant's subsidiary office closest to Bank is located 30 miles

northeast of Whaleyville and separated by the intervening city of Suffolk. Apparently no significant present competition exists between Bank and this office, or any of applicant's other offices. It also appears unlikely that consummation of this proposal would foreclose potential competition in the light of the facts of record, notably, Virginia's restrictive branching laws and the unlikelihood that applicant would establish a de novo bank in a community of the size Bank serves. Based on the foregoing, and the record before it, the Board concludes that consummation of the proposed transaction would not have an adverse effect on competition in any relevant market.

Considerations relating to financial condition, management and prospects, as they relate to applicant, its subsidiaries, and Bank are regarded as satisfactory and consistent with approval of the application. The major banking needs of the area are presently being met by the existing institutions; however, as a result of its affiliation with applicant, Bank would be able to offer expanded and improved services. Further, applicant states that it intends to augment the capital of Bank to enable it to establish branches. Affiliation with applicant should enable Bank to improve the quality and scope of its services and to become a more viable competitor to the other banks in the area. It is the Board's judgment that consummation of the proposed transaction would be in the public interest, and that the application should be approved.

It is hereby ordered, On the basis of the record, that said application be and hereby is approved for the reasons summarized above: *Provided*, That the action so approved shall not be consummated (a) before the 30th calendar day following the date of this order or (b) later than 3 months after the date of this order, unless such period is extended for good cause by the Board or by the Federal Reserve Bank of Richmond pursuant to delegated authority.

By order of the Board of Governors,¹
November 18, 1971.

[SEAL]

TYNAN SMITH,
Secretary of the Board.

[FR Doc. 71-17204 Filed 11-24-71; 8:48 am]

ZIONS UTAH BANCORPORATION

Order Approving Acquisition of Industrial Bank

Zions Utah Bancorporation, Salt Lake City, Utah, a bank holding company within the meaning of the Bank Holding Company Act of 1956, as amended, has applied for the Board's approval under section 4(c)(8) of the Act and § 222.4(b)(2) of the Board's Regulation Y to acquire all of the voting shares of Guaranty Industrial Bank, Loveland, Colo. Notice of the application, affording opportunity for interested persons to submit comments and views, has been duly

¹ Voting for this action: Chairman Burns and Governors Robertson, Daane, and Malsel. Absent and not voting: Governors Mitchell, Brimmer, and Sherrill.

published. The time for filing comments and views has expired and all received have been considered.

The operation by a bank holding company of an industrial bank is an activity that the Board has determined is closely related to banking if conducted in the manner authorized by State law, so long as the institution does not both accept demand deposits and make commercial loans and the activities of the institution are not conducted in a manner that is inconsistent with limitations the Board has established pursuant to section 4(c)(8) of the Act (§ 222.4(c) of Regulation Y).

It appears that Guaranty Industrial Bank does not accept demand deposits and engages solely in the activities described in § 222.4(a)(2) of Regulation Y. Accordingly, the activities of Guaranty are closely related to banking.

Guaranty has assets of approximately \$1 million; it serves a portion of Laramie County. Zions presently operates four industrial banks in Colorado, one of which (with assets of \$373,000) is located 15 miles south of Loveland in Fort Collins on the periphery of Laramie County. Numerous other financial institutions compete with Guaranty for savings deposits; 13 small loan companies, including three in Loveland, and a number of credit unions compete with Guaranty for loans.

It is anticipated that, following consummation of the proposal, Zions would augment Guaranty's capital structure, which will enable Guaranty to expand on a sound basis and allow it to make larger loans to individual borrowers. Affiliation with Zions would also provide Guaranty with access to improved marketing and auditing services. As a result, Guaranty should be in a position better to serve its customers and to provide more effective competition in its market area.

There is no significant competition between Zions' existing subsidiaries and Guaranty. Because of the large number of competing institutions within Laramie County, consummation of the proposal would only minimally decrease competition. There is no evidence in the record indicating that consummation of the proposed transaction would result in any undue concentration of resources, unfair competition, conflicts of interests, unsound banking practices, or other adverse effects on the public interest.

Based upon the foregoing and other considerations reflected in the record, the Board has determined that the balance of the public interest factors the Board is required to consider under section 4(c)(8) is favorable. Accordingly, the proposed activity is a proper incident to banking or managing or controlling banks within the meaning of that section. The application is approved, but the transaction shall not be consummated until 10 days from the date hereof.

By order of the General Counsel of the Board, November 19, 1971, acting on behalf of the Board pursuant to delegated authority (12 CFR 265.2(b)(2)).

[SEAL]

TYNAN SMITH,
Secretary of the Board.

[FR Doc. 71-17205 Filed 11-24-71; 8:45 am]

NATIONAL COMMISSION ON STATE WORKMEN'S COM- PENSATION LAWS

STATE WORKMEN'S COMPENSATION LAWS

Notice of a Public Hearing

Notice is hereby given of a public hearing to be held by the National Commission on State Workmen's Compensation Laws at Room 2010, New Executive Office Building, 726 Jackson Place NW, Washington, DC, commencing at 10 a.m. on January 24, 1972, and continuing through January 26, 1972, if necessary to accommodate persons requesting to testify. At the hearing, interested parties may make oral or written presentations of data, views, and arguments relating to the general question of whether State workmen's compensation laws provide an adequate, prompt and equitable system of compensation, and to possible methods which might be used by, and sources of information available to, the National Commission on State Workmen's Compensation Laws in making its study and preparing its report under section 27 of the Occupational Safety and Health Act of 1970 (84 Stat. 1616).

Interested persons shall, not later than twenty (20) days prior to the commencement of the hearing, file with the Chairman, National Commission on State Workmen's Compensation Laws, 1825 K Street NW, Washington, DC 20006, a notice of intention to appear which shall contain the following information:

1. Name and address of the person appearing.
2. The subject matter or matters to be discussed.
3. If such person is appearing in a representative capacity, the name and address of the persons or organizations he is representing.
4. The date and approximate length of time requested for his presentation.

Interested persons may also file written data, views, or arguments with the Commission at the above address.

The oral proceedings shall be stenographically reported and transcripts will be available to interested persons on payment of fees therefor. The Presiding Officer shall regulate the proceedings, dispose of procedural requests, objections, and comparable matters, and confine the presentation to matters pertinent to the inquiry. He shall have discretion to keep the record open after the close of the hearing to permit any person who participated in the oral presentation to submit additional data, views, and arguments responsive to the oral presentations made by other persons.

Signed at Washington, D.C., this 18th day of November 1971.

JOHN F. BURTON, Jr.,
Chairman.

[FR Doc. 71-17226 Filed 11-24-71; 8:51 am]

INTERSTATE COMMERCE COMMISSION

ASSIGNMENT OF HEARINGS

NOVEMBER 22, 1971.

Cases assigned for hearing, postponement, cancellation or oral argument appear below and will be published only once. This list contains prospective assignments only and does not include cases previously assigned hearing dates. The hearings will be on the issues as presently reflected in the Official Docket of the Commission. An attempt will be made to publish notices of cancellation of hearings as promptly as possible, but interested parties should take appropriate steps to insure that they are notified of cancellation or postponements of hearings in which they are interested.

- MC 19227 Sub 152, Leonard Bros. Trucking Co., Inc., now being assigned March 2, 1972, at New Orleans, La.
- MC 29910 Sub 101, Arkansas-Best Freight System, Inc., assigned February 22, 1972, at New Orleans, La.
- MC 51146 Sub 205, Schneider Transport & Storage, Inc., now being assigned March 1, 1972, at New Orleans, La.
- MC 106644 Sub 118, Superior Trucking Co., now being assigned March 2, 1972, at New Orleans, La.
- MC 107002 Sub 405, Miller Transporters, Inc., now being assigned February 28, 1972, at New Orleans, La.
- MC 119774 Sub 24, Doing business as Eagle Trucking Co., now being assigned February 25, 1972, at New Orleans, La.
- MC 127028 Sub 7, Bredelhoeft Produce Co., Inc., now being assigned February 23, 1972, at New Orleans, La.
- MC 135586, Prassel Enterprises, Inc., now being assigned February 24, 1972, at New Orleans, La.
- MC 10994 Sub 45, Sizer Trucking, Inc., assigned December 9, 1971, at St. Paul, Minn., canceled and application dismissed.
- MC 124211 Sub 187, Hilt Truck Line, Inc., now being assigned hearing February 7, 1972, at Chicago, Ill., in a hearing room to be later designated.
- MC 124211 Sub 188, Hilt Truck Line, Inc., now being assigned hearing on February 7, 1972, at Chicago, Ill., in a hearing room to be later designated.
- MC 126278 Sub 53, Fast Motor Service, Inc., now being assigned hearing February 9, 1972, at Chicago, Ill., in a hearing room to be later designated.
- MC 129648 Sub 7, Trans-United, Inc., now being assigned hearing February 11, 1972, at Chicago, Ill., in a hearing room to be later designated.
- MC 111375 Sub 51, Pirkle Refrigerated Freight Lines, now being assigned hearing February 14, 1972, at Chicago, Ill., in a hearing room to be later designated.
- MC 21455 Sub 24, Gene Mitchell Co., now being assigned hearing on February 16, 1972, at Chicago, Ill., in a hearing room to be later designated.
- MC 119531 Sub 152, Dieckbrader Express, Inc., now being assigned hearing on February 18, 1972, at Chicago, Ill., in a hearing room to be later designated.
- MC-F-11133, MC 128944 Sub 9, Reliable Truck Lines, MC-F-11134, MC 55889 Sub 39, Cooper Transfer Co., MC-F-11143, MC 11220 Sub 123, Gordons Transports, MC-F-11150, MC 59583 Sub 130, The

Mason & Dixon Lines, now assigned December 6, 1971, at Montgomery, Ala., postponed to January 18, 1972, at Birmingham, Ala., in the Red Carpet Motor Inn, 2040 Highland Avenue.

- MC 25798 Sub 225, Clay Hyder Trucking Lines, Inc., now being assigned February 29, 1972, at Omaha, Nebr., hearing room to be later designated.
- MC 103993 Sub 629, Morgan Drive-Away, Inc., now being assigned February 28, 1972, at Omaha, Nebr., hearing room to be later designated.
- MC 113382 Sub 14, Nelsen Bros., Inc., now being assigned February 25, 1972, at Omaha, Nebr., hearing room to be later designated.
- MC 123639 Sub 135, J. B. Montgomery, Inc., now being assigned March 2, 1972, at Omaha, Nebr., hearing room to be later designated.
- MC 124211 Sub 185, Hilt Truck Line, Inc., now being assigned February 24, 1972, at Omaha, Nebr., hearing room to be later designated.
- MC 124211 Sub 181, Hilt Truck Line, Inc., now being assigned February 22, 1972, at Omaha, Nebr., hearing room to be later designated.
- MC 2860 Sub 98, National Freight, Inc., now assigned hearing January 27, 1972, at the Offices of the Interstate Commerce Commission, Washington, D.C.
- MC 83539 Sub 316, C & H Transportation Co., Inc., now assigned January 27, 1972, at the Offices of the Interstate Commerce Commission, Washington, D.C.
- MC 106274 Sub 15, Radford Trucking Co., now being assigned January 24, 1972, at the Offices of the Interstate Commerce Commission, Washington, D.C.
- MC 106644 Sub 119, Superior Trucking Co., Inc., now assigned January 24, 1972, at the Offices of the Interstate Commerce Commission, Washington, D.C.
- MC 108676 Sub 41, A. J. Metter Hauling and Rigging, Inc., now assigned January 26, 1972, at the Offices of the Interstate Commerce Commission, Washington, D.C.
- MC 113666 Sub 57, Freeport Transport, Inc., now being assigned January 24, 1972, at the Offices of the Interstate Commerce Commission, Washington, D.C.
- MC 119789 Sub 68, Caravan Refrigerated Cargo, Inc., now assigned February 3, 1972, at the Offices of the Interstate Commerce Commission, Washington, D.C.
- MC 340 Sub 18, Querner Truck Lines, now assigned February 14, 1972, at Dallas, Tex., hearing room to be designated later.
- MC 65224 Sub 8, Hennis Freight Lines, of Canada, Ltd., doing business as Florida Refrigerated Service, now assigned February 7, 1972, at Dallas, Tex., a hearing room to be designated later.
- MC 107295 Sub 500, Pre-Fab Transit, now assigned February 15, 1972, at Dallas, Tex., a hearing room to be designated later.
- MC 107515 Sub 753, Refrigerated Transport, now assigned February 16, 1972, at Dallas, Tex., a hearing room to be designated later.
- MC-F-11239, Eagle Motor Lines—Purchase—Southwest Oilfield Transportation, now assigned February 9, 1972, at Dallas, Tex., a hearing room to be designated later.
- MC-F-11228, Refrigerated Transport Co., Inc.—Purchase (Portion)—Subler Transfer, Inc., now being assigned hearing March 20, 1972, at the Offices of the Interstate Commerce Commission, Washington, D.C.

[SEAL] ROBERT L. OSWALD,
Secretary.

[FR Doc.71-17297 Filed 11-24-71;8:55 am]

FOURTH SECTION APPLICATION FOR RELIEF

NOVEMBER 22, 1971.

Protests to the granting of an application must be prepared in accordance with § 1100.40 of the general rules of practice (49 CFR 1100.40) and filed within 15 days from the date of publication of this notice in the FEDERAL REGISTER.

LONG-AND-SHORT HAUL

FSA No. 42310—*Beet or cane sugar to Kenosha, Wis.* Filed by Burlington Northern Inc., (No. 3), for interested rail carriers. Rates on sugar, beet or cane, in carloads, as described in the application, from specified points in North Dakota and Minnesota, to Kenosha, Wis.

Grounds for relief—Market competition and rate relationship.

Tariff—Supplement 63 to H. H. Kirchoff, agent, tariff ICC 21. Rates are published to become effective on December 18, 1971.

By the Commission.

[SEAL] ROBERT L. OSWALD,
Secretary.

[FR Doc.71-17296 Filed 11-24-71;8:55 am]

[Notice 400]

MOTOR CARRIER TEMPORARY AUTHORITY APPLICATIONS

NOVEMBER 22, 1971.

The following are notices of filing of applications for temporary authority under section 210a(a) of the Interstate Commerce Act provided for under the new rules of Ex Parte No. MC-67 (49 CFR Part 1131), published in the FEDERAL REGISTER, issue of April 27, 1965, effective July 1, 1965. These rules provide that protests to the granting of an application must be filed with the field official named in the FEDERAL REGISTER publication, within 15 calendar days after the date of notice of the filing of the application is published in the FEDERAL REGISTER. One copy of such protests must be served on the applicant, or its authorized representative, if any, and the protests must certify that such service has been made. The protests must be specific as to the service which such protestant can and will offer, and must consist of a signed original and six copies.

A copy of the application is on file, and can be examined at the Office of the Secretary, Interstate Commerce Commission, Washington, D.C., and also in field office to which protests are to be transmitted.

MOTOR CARRIERS OF PROPERTY

No. MC 35807 (Sub-No. 22 TA), filed November 9, 1971. Applicant: WELLS FARGO ARMORED SERVICE CORPORATION, 210 Baker Street NW., 30313, Mailing: Post Office Box 4313, Atlanta, GA 30302. Applicant's representative: Harry J. Jordan, 1000 16th Street NW., Washington, DC 20036. Au-

thority sought to operate as a *contract carrier*, by motor vehicle, over irregular routes, transporting: *Coin*, between Miami, Fla., on the one hand, and, on the other, points in Boston, New York, Buffalo, Philadelphia, Cleveland, Cincinnati, Pittsburgh, Baltimore, Charlotte, Atlanta, Birmingham, Jacksonville, Nashville, New Orleans, Chicago, Detroit, St. Louis, Little Rock, Louisville, Memphis, Minneapolis, Helena, Kansas City, Missouri, Denver, Oklahoma, Omaha, Dallas, El Paso, Houston, San Antonio, San Francisco, Los Angeles, Portland, Seattle, Fort Knox, West Point, Salt Lake City, and Washington, D.C., for 180 days. Supporting shipper: General Services Administration, Washington, D.C. 20405. Send protests to: William L. Scroggs, District Supervisor, Interstate Commerce Commission, Bureau of Operations, Room 309, 1252 West Peachtree Street NW., Atlanta, GA 30309.

No. MC 75302 (Sub-No. 10 TA) (Correction), filed October 26, 1971, published FEDERAL REGISTER November 9, 1971, corrected and republished in part as corrected this issue. Applicant: DOUDEL TRUCKING COMPANY, Post Office Box 842, 545 Queens Row, San Jose, CA 95106. Applicant's representative: Raymond A. Greene, Jr., 405 Montgomery Street, San Francisco, CA 94104. NOTE: The purpose of this partial republication is to set forth the correct Docket No. MC 75302 (Sub-No. 10 TA), in lieu of No. MC 75302 (Sub-No. 8 TA), shown erroneously in previous publication. The rest of the notice remains the same.

No. MC 111812 (Sub-No. 437 TA) (Correction), filed September 29, 1971, published FEDERAL REGISTER October 16, 1971, corrected and republished in part as corrected this issue. Applicant: MIDWEST COAST TRANSPORT, INC., 405½ E. Eighth Street, Post Office Box 1233, Wilson Terminal Building, Sioux Falls, SD 57101. Applicant's representative: R. H. Jinks (same address as above). NOTE: The purpose of this partial republication is to add *cocoa butter* to the commodity description, which was inadvertently omitted in previous publication. The rest of the notice remains the same.

No. MC 118270 (Sub-No. 5 TA), filed November 11, 1971. Applicant: PRODUCE TRANSPORT SERVICE, INC., 181 West Ramapo Avenue, Mahwah, NJ 07430. Applicant's representative: Blanton P. Bergen, 137 East 36th Street, New York, NY 10016. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Bananas*, from Charleston, S.C., to points in Pennsylvania, New York, New Jersey, Connecticut, Massachusetts, and Rhode Island, for 180 days. Supporting shipper: Chiquita Brands, Inc., 1250 Broadway, New York, NY 10001. Send protests to: District Supervisor Joel Morris, Bureau of Operations, Interstate Commerce Commission, 970 Broad Street, Newark, NJ 07102.

No. MC 123497 (Sub-No. 5 TA), filed November 11, 1971. Applicant: WOOD-

LAND TRANSPORT, INC., Box 72, Siren, WI 54872. Applicant's representative: Marion I. Anderson (same address as above). Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Used snowmobiles*, from points in Wisconsin, Illinois, and Minnesota to points in Montana and Wyoming, and return, for 180 days. Supporting shippers: Waupaca Snowmobile Group, Waupaca, Wis.; Burnett County Snowmobile Organization, Siren, Wis.; Stage Coach Corp., West Yellowstone, Mont. Send protests to: District Supervisor Raymond T. Jones, Interstate Commerce Commission, Bureau of Operations, 448 Federal Building and U.S. Court House, 110 South Fourth Street, Minneapolis, MN 55401.

No. MC 125254 (Sub-No. 11 TA), filed November 11, 1971. Applicant: DONALD L. MORGAN, doing business as MORGAN TRUCKING CO., 1201 East Fifth Street, Post Office Box 714, Muscatine, IA 52761. Applicant's representative: Larry D. Knox, 900 Hubbell Building, Des Moines, Iowa 50309. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Foodstuffs* (except in bulk) from Iowa City, Iowa, to points in Minnesota (except St. Paul and Minneapolis), South Dakota, North Dakota, Missouri (except Kansas City and St. Louis and St. Joseph, Mo., and its commercial zone), Kansas (except Kansas City), Iowa, and Rock Island, Ill. Restriction: The authority sought herein is restricted to the transportation of shipments originating at the above-named origin and destined to the above-named destinations, for 180 days. Supporting shipper: Heinz U.S.A. Division of H. J. Heinz Co., Post Office Box 57, Pittsburgh, PA 15230. Send protests to: Ellis L. Annett, District Supervisor, Interstate Commerce Commission, Bureau of Operations, 677 Federal Building, Des Moines, Iowa 50309.

No. MC 128343 (Sub-No. 18 TA), filed November 11, 1971. Applicant: C-LINE, INC., Touretellot Hill Road, Chepachet, R.I. 02814. Applicant's representative: Ronald N. Cobert, Suite 501, 1730 M Street NW., Washington, DC 20036. Authority sought to operate as a *contract carrier*, by motor vehicle, over irregular routes, transporting: *Plastic materials, plastic products, and supplies* used in the manufacture and distribution thereof, between Jermon, Idaho, on the one hand, and, on the other, North Smithfield, R.I., Halls, Tenn., and ports of entry on the United States-Canada boundary line in Michigan, New York, and Vermont, for 180 days. Supporting shipper: The Tupperware Co., North Smithfield, R.I. 02895. Send protests to: Gerald H. Curry, District Supervisor, Interstate Commerce Commission, Bureau of Operations, 187 Westminster Street, Providence, RI 02903.

No. MC 135887 (Sub-No. 1 TA), filed November 11, 1971. Applicant: VOYNE E. GLEASON, Post Office Box 209, Coeur D'Alene, ID 83814. Applicant's representative: Joseph O. Earp, 411 Lyon Building, Seattle, Wash. 98104. Author-

ity sought to operate as a *contract carrier*, by motor vehicle, over irregular routes, transporting: *Wine and malt beverages*, from Van Nuys, Azusa, Modesto, and Saratoga, Calif., to Coeur D'Alene, Idaho. Supporting shipper: Panhandle Distributors, Inc., Post Office Box 614, Coeur D'Alene, ID 83814. Send protests to: E. J. Casey, District Supervisor, Interstate Commerce Commission, Bureau of Operations, 6130 Arcade Building, Seattle, Wash. 98101.

No. MC 136100 (Correction), filed October 21, 1971, published FEDERAL REGISTER November 9, 1971, corrected and republished in part as corrected this issue. Applicant: K & K TRANSPORTATION CORP., 4515 North 24 Street, Omaha, NE 68110. Applicant's representative: Einar Viren, 904 City National Bank Building, Omaha, Nebr. 68102. NOTE: The purpose of this partial republication is to add "folding cartons and corrugated cases" to the commodity description in paragraph 2 above, which was inadvertently omitted in previous publication. The rest of the notice remains the same.

MOTOR CARRIER OF PASSENGERS

No. MC 668 (Sub-No. 96 TA), filed November 11, 1971. Applicant: INTERCITY TRANSPORTATION CO., INC., 419 Anderson Avenue, Fairview, NJ 07022. Applicant's representative: Edward F. Bowes, 744 Broad Street, Newark, NJ 07102. Authority sought to operate as a *common carrier*, by motor vehicle, over regular routes, transporting: *Passengers and their baggage and express and newspapers* in the same vehicle with passengers, (1) between Ridgefield Park, and Hackensack, N.J., from the junction of U.S. Highway 46 and Interstate Highway 95 (New Jersey Turnpike), Ridgefield Park, N.J., over Interstate Highway 95 to junction Interstate Highway 80 and Interstate Highway 95 in Teaneck at the Ridgefield Park-Teaneck boundary line, then over Interstate Highway 80 to the interchange of Interstate Highway 80 at junction New Jersey Highway 17, then over the interchange to New Jersey Highway 17, and return over the same route, for operating convenience only, serving no intermediate points; (2) between Hackensack, N.J., and Hackensack, N.J., from Interstate Highway 80 interchange at the junction of Interstate Highway 80 and New Jersey Highway 17, over Interstate Highway 80 to the interchange of Interstate Highway 80 at Polifly Road, then over the Interchange to junction Polifly Road, then over Polifly Road to junction Essex Street, then over Essex Street to junction Summit Avenue and return over the same routes, for operating convenience only, serving no intermediate points; and (3) in conjunction with this proposed service on New Jersey Highway 17 the applicant already is authorized to operate with closed doors on New Jersey Highway 17 at the junction of New Jersey Highway 17 and the interchange with Interstate Highway 80 in Hackensack, N.J. It is requested that the existing restriction against service on New Jersey Highway 17 at such junction

be lifted solely for the purpose of permitting joinder of the proposed route at the junction of New Jersey Highway 17 and the interchange of Interstate Highway 80 in Hackensack, N.J., for 180 days.

NOTE: The applicant proposes to join the above-described routes (a) to its existing 41 route between Midland Park and New York, N.Y., over the Lincoln Tunnel, serving the intermediate points of Ridgewood, Hawthorne, Glen Rock, and Fair Lawn; and (b) to its existing 35 line between Ridgewood, N.J., and New York, N.Y., over the Lincoln Tunnel serving the intermediate points of Ridgewood, Paramus, Rochelle Park, Maywood, and Hackensack, N.J., with service at Hackensack limited to Hackensack, N.J., west and north of the junction of Essex Street and Summit Avenue including such junction. Supported by: W. C. White, 476 Sutton Avenue, Hackensack, NJ, and approximately 280 other passengers signatures on file at Newark, N.J., Interstate Commerce Commission field office. Send protests to: District Supervisor Joel Morrings, Bureau of Operations, Interstate Commerce Commission, 970 Broad Street, Newark, NJ 07102.

By the Commission.

[SEAL] ROBERT L. OSWALD,
Secretary.

[FR Doc.71-17295 Filed 11-24-71;8:54 am]

[Notice 93]

MOTOR CARRIER, BROKER, WATER CARRIER AND FREIGHT FORWARDER APPLICATIONS

NOVEMBER 19, 1971.

The following applications are governed by Special Rule 1100.247¹ of the Commission's general rules of practice (49 CFR, as amended), published in the FEDERAL REGISTER issue of April 20, 1966, effective May 20, 1966. These rules provide, among other things, that a protest to the granting of an application must be filed with the Commission within 30 days after date of notice of filing of the application is published in the FEDERAL REGISTER. Failure seasonably to file a protest will be construed as a waiver of opposition and participation in the proceeding. A protest under these rules should comply with § 247(d)(3) of the rules of practice which requires that it set forth specifically the grounds upon which it is made, contain a detailed statement of protestant's interest in the proceeding (including a copy of the specific portions of its authority which protestant believes to be in conflict with that sought in the application, and describing in detail the application, and describing in detail the method—whether by joinder, interline, or other means—by which protestant would use such authority to provide all or part of the service proposed), and shall specify with particularity the facts,

and things relied upon, but shall not include issues or allegations phrased generally. Protests not in reasonable compliance with the requirements of the rules may be rejected. The original and one copy of the protest shall be filed with the Commission, and a copy shall be served concurrently upon applicant's representative, or applicant if no representative is named. If the protest includes a request for oral hearing, such requests shall meet the requirements of § 1.247(d)(4) of the special rules, and shall include the certification required therein.

Section 1.247(f) of the Commission's rules of practice further provides that each applicant shall, if protests to its application have been filed, and within 60 days of the date of this publication, notify the Commission in writing (1) that it is ready to proceed and prosecute the application, or (2) that it wishes to withdraw the application, failure in which the application will be dismissed by the Commission.

Further processing steps (whether modified procedure, oral hearing, or other procedures) will be determined generally in accordance with the Commission's General Policy Statement Concerning Motor Carrier Licensing Procedures, published in the FEDERAL REGISTER issue of May 3, 1966. This assignment will be by Commission order which will be served on each party of record.

The publications hereinafter set forth reflect the scope of the applications as filed by applicants, and may include descriptions, restrictions, or limitations which are not in a form acceptable to the Commission. Authority which ultimately may be granted as a result of the applications here noticed will not necessarily reflect the phraseology set forth in the application as filed, but also will eliminate any restrictions which are not acceptable to the Commission.

No. MC 2202 (Sub-No. 398) (Amendment), filed August 24, 1971, published in the FEDERAL REGISTER issue of October 7, 1971 and republished in part as amended this issue. Applicant: ROADWAY EXPRESS, INC., 1077 Gorge Boulevard, Post Office Box 471, Akron, OH 44309. Applicant's representative: James W. Conner (same address as applicant). **NOTE:** The purpose of this partial republication is to show that applicant seeks to serve Myrtle Grove, La., in lieu of Alliance, La., as was shown in the previous publication. The rest of the application remains as previously published.

No. MC 2229 (Sub-No. 166), filed October 14, 1971. Applicant: RED BALL MOTOR FREIGHT, INC., 3177 Irving Boulevard, Post Office Box 47407, Dallas, TX 75247. Applicant's representative: Martin B. Turner (same address as applicant). Authority sought to operate as a common carrier, by motor vehicle, over regular routes, transporting: General commodities (except those of unusual value, household goods as defined by the Commission, commodities in bulk, commodities requiring special equipment

and those injurious or contaminating to other lading), serving the plantsite of R. G. LeTourneau Co. (Marathon LeTourneau Co.) near Vicksburg, Miss., as off-route point in connection with carrier's regular route operations at Vicksburg, Miss., and serving no intermediate points. **NOTE:** If a hearing is deemed necessary, applicant requests it be held at Vicksburg or Jackson, Miss.

No. MC 2900 (Sub-No. 216), filed October 18, 1971. Applicant: RYDER TRUCK LINES, INC., 2050 Kings Road, Jacksonville, FL 32203. Applicant's representative: John Carter (same address as above). Authority sought to operate as a common carrier, by motor vehicle, over regular and irregular routes, transporting: Candy and confectionery: (1) over regular route: Serving the plantsite and storage facilities of Peter Paul, Inc., at or near Frankfort, Ind., as an off-route point in connection with applicant's presently authorized regular-route operations between Chicago, Ill., and Indianapolis, Ind.; and (2) over irregular routes: Transporting food, food-stuffs and food preparations, from Kendallville, Ind., to points in Alabama, Florida, Georgia, Kentucky, Louisiana, New York, North Carolina, Pennsylvania, South Carolina, and Tennessee. **NOTE:** Applicant states that the requested authority cannot be tacked with its existing authority. Common control may be involved. If a hearing is deemed necessary, applicant requests it be held at Indianapolis, Ind., or Chicago, Ill.

No. MC 4405 (Sub-No. 488), filed October 20, 1971. Applicant: DEALERS TRANSIT, INC., 7701 South Lawndale Avenue, Chicago, IL 60652. Applicant's representative: Robert E. Joyner, 2111 Sterick Building, Memphis, TN 38103. Authority sought to operate as a common carrier, by motor vehicle, over irregular routes, transporting: Metal buildings, wall sections and parts thereof, from Indiana County, Pa., to points in the United States (except Alaska and Hawaii). **NOTE:** Applicant states that the requested authority cannot be tacked with its existing authority. Common control may be involved. If a hearing is deemed necessary, applicant requests it be held at Washington, D.C.

No. MC 9050 (Sub-No. 32), filed October 22, 1971. Applicant: SEEGER BROS., a corporation, Hillside Avenue, Kenil, NJ 07847. Applicant's representative: James J. Farrell, 206 North Boulevard, Belmar, NJ 07719. Authority sought to operate as a contract carrier, by motor vehicle, over irregular routes, transporting: Classes A, B and C explosives, ammonium nitrate and nitro-carbo-nitrate, between McAdory, Ala., on the one hand, and, on the other, points in Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia, and the District of Columbia, under contract with Hercules, Inc., Wilmington, Del. **NOTE:** If a hearing is deemed necessary, applicant requests it be held at New York, N.Y., or Washington, D.C.

¹ Copies of Special Rule 1.247 (as amended) can be obtained by writing to the Secretary, Interstate Commerce Commission, Washington, D.C. 20423.

No. MC 10761 (Sub-No. 259), filed October 19, 1971. Applicant: TRANS-AMERICAN FREIGHT LINES, INC., 1700 North Waterman Avenue, Detroit, MI 48209. Applicant's representative: A. Alvis Layne, Pennsylvania Building, Washington, D.C. 20004. Authority sought to operate as a *common carrier*, by motor vehicle, over regular routes, transporting: *General commodities* (except those of unusual value, classes A and B explosives, livestock, and household goods as defined by the Commission), serving the plantsite of PPG Industries at or near Mount Holly Springs, Pa., as an off-route point in connection with presently authorized, regular-route operations to and from Harrisburg, Pa. NOTE: If a hearing is deemed necessary, applicant requests it be held at Pittsburgh, Pa.

No. MC 10761 (Sub-No. 260), filed October 21, 1971. Applicant: TRANS-AMERICAN FREIGHT LINES, INC., 1700 North Waterman Avenue, Detroit, MI 48209. Applicant's representative: A. Alvis Layne, Pennsylvania Building, Washington, D.C. 20004. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Frozen foods*, from Mattoon, Ill., to points in Connecticut, Delaware, Georgia, Indiana, Iowa, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Vermont, Virginia, West Virginia, Wisconsin, and the District of Columbia, restricted to the transportation of traffic originating at the above-named origin point and destined to the above-named destinations. NOTE: If a hearing is deemed necessary, applicant requests it be held at Chicago, Ill.

No. MC 17091 (Sub-No. 8), filed October 25, 1971. Applicant: ISAAC JONES, JR., 321 Lexington Avenue, Pitman, NJ 08071. Applicant's representative: Alan Kahn, 1920 Two Penn Center Plaza, Philadelphia, PA 19102. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Scrap materials* in dump vehicles, from Danbury, Conn., to Reading and Sinking Spring, Pa. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Danbury, Conn., or Philadelphia, Pa.

No. MC 20992 (Sub-No. 22), filed October 21, 1971. Applicant: DOTSETH TRUCK LINE, INC., Knapp, Wis. 54749. Applicant's representative: Gary L. Bakke, New Richmond, Wis. 54017. Authority sought to operate as *common carrier*, by motor vehicle, over irregular routes, transporting: *Farm machinery, parts and attachments*, (1) from Green Isle, Minn., to points in North Dakota, South Dakota, Nebraska, Iowa, Wisconsin, Michigan, Illinois, Indiana, Missouri, Kansas, Colorado, Wyoming, Montana, Ohio, Pennsylvania, and New York; (2) from Grinnell, Iowa, to points in North

Dakota, South Dakota, Nebraska, Minnesota, Wisconsin, Michigan, Illinois, Indiana, Missouri, Kansas, Colorado, Wyoming, Montana, Ohio, Pennsylvania, and New York; and (3) from Greeley, Colo., to points in North Dakota, South Dakota, Nebraska, Iowa, Wisconsin, Michigan, Illinois, Indiana, Missouri, Kansas, Minnesota, Wyoming, Montana, Ohio, Pennsylvania, and New York. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Minneapolis, Minn., or Madison, Wis.

No. MC 21337 (Sub-No. 3), filed September 20, 1971. Applicant: RAPID FILM SERVICE, INC., East Hi-Way 30, Grand Island, Nebr. 68861. Applicant's representative: George H. Pabian, 1116 South Sixth Street, Omaha, NE. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Motion picture film and commodities generally*, (1) between Carter Lake and Council Bluffs, Iowa, and Omaha, Nebr., over U.S. Highways 30 and 6 to the junction with U.S. Highway 275, thence on U.S. Highway 275 to Fremont, thence over U.S. Highway 30 to Grand Island, Nebr., all intermediate points to be served; no off-route points to be served; (2) between Grand Island and Gothenburg, Nebr., from Grand Island over U.S. Highway 30, to Farnam over Nebraska Highway 47; thence to Holdrege over Nebraska Highway 23; thence south to Alma over U.S. Highway 183; thence over U.S. Highway 136 to Franklin; thence to Minden over Nebraska Highway 10 and return to Grand Island over U.S. Highway 34, all intermediate points to be served, serving the off-route points of Kenesaw and Doniphan; (3) from Grand Island, Nebr., in the following circular manner; north over U.S. Highway 281 to Greeley; thence south from Greeley over U.S. Highway 281 to the junction with Nebraska Highway 22; thence over Nebraska Highway 22 to Scotia; thence over Nebraska Highway 11 to Burwell; thence over Nebraska Highway 91 to Taylor; thence over U.S. Highway 183 to the junction with Nebraska Highway 70; thence over Nebraska Highway 70 to Broken Bow; thence over Nebraska Highway 92 to Loup City; thence over Nebraska Highway 10 to junction with Nebraska Highway 2; thence over Nebraska Highway 2 to Grand Island, serving all intermediate points; serving the off-route points of Comstock, Arcadia, and Mason City, Nebr. Service between Grand Island and Broken Bow, Nebr., over Nebraska Highways 2 and 92; service between Grand Island and Broken Bow, Nebr., over Nebraska Highway 281 to St. Paul and thence over Nebraska Highway 92 to Broken Bow, Nebr., and (4) between Holdrege and Alma, Nebr., in a circuitous manner; southwest over U.S. Highway 6 to Cambridge; thence over Nebraska Highway 47 to the junction with Nebraska Highway 89; thence over Nebraska Highway 89 to Alma and return to Holdrege over U.S. Highway 183, serving all intermediate points and the off-route points of Edison,

Oxford, and Oxford Junction. NOTE: Applicant herein seeks to add Carter Lake, Iowa, and Council Bluffs, Iowa, with its presently held authority and convert its Certificate of Registration to a Certificate of Public Convenience and Necessity. If a hearing is deemed necessary, applicant requests it be held at Omaha or Lincoln, Nebr.

No. MC 27817 (Sub-No. 98), filed October 14, 1971. Applicant: H. C. GABLER, INC., Rural Delivery No. 3, Chambersburg, PA 17201. Applicant's representative: Christian V. Graf, 407 North Front Street, Harrisburg, PA 17101. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Pet food*, from Baltimore, Md., to Cleveland, Ohio. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Harrisburg, Pa., or Washington, D.C.

No. MC 30605 (Sub-No. 147), filed September 22, 1971. Applicant: THE SANTA FE TRAIL TRANSPORTATION COMPANY, a corporation, 433 East Waterman Street, Wichita, KS 67201. Applicant's representative: F. J. Steinbrecher, 80 East Jackson Boulevard, Chicago, IL 60604. Authority sought to operate as a *common carrier*, by motor vehicle, over regular routes, transporting: *General commodities* (except liquid nitroglycerine, commodities of unusual value, household goods as defined by the Commission, commodities in bulk, and commodities requiring special equipment), (A) between Los Angeles International Airport, San Francisco International Airport, and points in California as follows: (1) Between Fontana, Calif., and the plant of Kaiser Co., Inc., located 3 miles west of Fontana, serving no intermediate points: (a) From Fontana over Arrow Boulevard to Cherry Street, thence over Cherry Street to the plant of Kaiser Co., Inc., and return over the same route; (b) from Fontana over Foothill Boulevard to Cherry Street, thence over Cherry Street to the plant of Kaiser Co., Inc., and return over the same route, and (c) from Fontana over Merrill Street to Cherry Street, thence over Cherry Street to the plant of Kaiser Co., Inc., and return over the same route; (2) from San Francisco over U.S. Highway 50 to junction California Highway 120 (near Lathrop), and thence over California Highway 120 to Manteca, and return over the same route; (3) from San Francisco over Interstate Highway 80 to junction California Highway 4² near Rodeo, thence over California Highway 4 to junction U.S. Highway 99 (near Stockton), and thence over U.S. Highway 99 to Manteca, and return over the same route; (4) From Manteca over U.S. Highway 99 to Los Angeles, and return over the same route; (5) from Los Angeles over city streets, through Inglewood, El Segundo, Redondo Beach, and Wilmington, to San Pedro and Long Beach and return

² Changed from California Highway 40 to California Highway 4.

over the same route; (6) from Los Angeles over U.S. Highway 66 to Fontana and return over the same route; (7) from Los Angeles over U.S. Highway 66-A to junction U.S. Highway 66 (near Arcadia), and return over the same route; (8) from Los Angeles over U.S. Highway 101 or Interstate Highway 5 to San Diego and National City and return over the same route; (9) from Los Angeles over U.S. Highway 101 Bypass or Interstate Highway 5 to junction U.S. Highway 101 (near Orange), and return over the same route; (10) from junction U.S. Highway 101 Bypass or Interstate Highway 5 and Commonwealth Avenue, in Buena Park, over Commonwealth Avenue to Fullerton, thence over California Highway 14 to junction California Highways 14 and 18 (east of Olive), and return over the same route; (11) from Santa Ana over Interstate Highway 5 to Orange, thence over unnumbered highways to Olive and thence over California Highway 18 to junction California Highways 14 and 18 (east of Olive), and return over the same route; (12) from junction California Highways 14 and 18 (east of Olive) to junction California Highway 91, thence over California Highway 91 to Riverside and thence over U.S. Highway 395 to Colton and return over the same route; (13) from Corona over California Highway 71 to Elsinore and return over the same route; (14) from Riverside over U.S. Highway 395 to Perris, thence over California Highway 74 to Hemet and thence over California Highway 79 to San Jacinto and return over the same route; (15) from Oakland over California Highway 24 to junction California Highways 4 and 24 (near Concord) and thence over California Highways 4 and 24 to Pittsburg and return over the same route; (16) from junction U.S. Highway 50 and California Highway 120 (near Lathrop) over U.S. Highway 50 to Stockton and return over the same route; (17) from Turner over an unnumbered highway to Simms and return over the same route; (18) From Manteca over California Highway 120 to Oakdale and return over the same route; (19) from Salida over unnumbered highways, through Riverbank to Oakdale and return over the same route; (20) from Modesto over unnumbered highway to Escalon and return over the same route; (21) from Modesto over California Highway 132 to Empire and thence over unnumbered highways through Hughson and Denair to Turlock and return over the same route; (22) from Ceres over an unnumbered highway to Hughson and return over the same route; (23) from Livingston over unnumbered highways, through Winton to Atwater and return over the same route; (24) from Merced over California Highway 140 to Planada and thence over unnumbered highways, through Le Grand, to Minturn and return over the same route; (25) from Le Grand over unnumbered highway to junction California Highway 99 and return over the same route; (26) from Fresno over California Highway 41 to junction unnumbered highway (west of Conejo) and return over unnumbered highways, through

Conejo, Laton, Hanford, Guernsey, Corcoran, Stoll, and Allensworth to Earlimart and return over the same route; (27) from Laton over unnumbered highways to Kingsburg and return over the same route; (28) from Hanford over California Highway 198 to Wasalia and return over the same route; (29) from Corcoran over unnumbered highways to Tulare and return over the same route; (30) from Corcoran over unnumbered highways to Tipton and thence over California Highway 190 to Porterville and return over the same route; (31) from Stoll over an unnumbered highway to Alpaugh and return over the same route; (32) from junction California Highway 99 and an unnumbered highway (south of Delano) over that unnumbered highway to Pond, thence over unnumbered highways, through Wasco, to Shafter, and thence over Lerdo Road to Lerdo and return over the same route; (33) from Wasco over an unnumbered highway to junction California Highway 99 and return over the same route;

(34) From Shafter over an unnumbered highway to junction with California Highway 178, thence over California Highway 178 to Bakersfield and return over the same route; (35) from Fresno over California Highway 180 to Minkler, thence over an unnumbered highway to Reedley and return over the same route; (36) from Minkler over unnumbered highways to Orange Cove and return over the same route; (37) from Cutler over unnumbered highways to junction California Highway 65, thence over California Highway 65 to Exeter and return over the same route; (38) from Potererville over California Highway 65 to junction unnumbered highway (formerly California Highway 65) (near Ducor, Calif.), thence over unnumbered highway to junction California Highway 99 (near Famosa) and return over the same route; (39) from Redondo Beach over city streets through Torrance, to Wilmington and return over the same route; (40) from Azusa over Azusa Avenue to junction California Highway 99 (near West Covina) and return over the same route; (41) from junction U.S. Highway 66 and California Highway 71 (near Claremont) over California Highway 71 to junction California Highway 99 (near Pomona) and return over the same route; (42) from junction U.S. Highway 66 and Archibald Avenue (near Cucamonga) over Archibald Avenue to junction California Highway 99 (near Guasti) and return over the same route; (43) from junction U.S. Highway 66 and Cherry Avenue (near plant of Kaiser Co., Inc.) over Cherry Avenue to junction California Highway 99 and return over the same route; (44) from junction U.S. Highway 66 and Sierra Avenue (near Fontana) over Sierra Avenue to junction California Highway 99 and return over the same route;

(45) From Los Angeles over U.S. Highway 101 to junction California Highway 35 (near Pico), thence over California Highway 35 to Santa Fe Springs, thence over Anaheim-Telegraph Road, Leffingwell Road, and Central Avenue to junc-

tion U.S. Highway 101 (near La Habra), thence over U.S. Highway 101 to junction U.S. Highway 101 Bypass (near Anaheim) and return over the same route; (46) from junction U.S. Highway 101 Bypass and California Highway 19 (near Rivera) over unnumbered highway to Santa Fe Springs and thence over California Highway 35 to junction U.S. Highway 101 Bypass (near Norwalk) and return over the same route; (47) from junction Anaheim-Telegraph Road and Valley View Avenue over unnumbered highway to junction U.S. Highway 101 Bypass (near Buena Park) and return over the same route; (48) from Linda Vista over an unnumbered highway to junction with Interstate Highway 5 (near San Diego) and return over the same route; (49) from junction U.S. Highway 101 Bypass and California Highway 91 (near Anaheim) over California Highway 91 to Olive and return over the same route; (50) from junction U.S. Highway 101 and Chapman Avenue (near Fullerton) over Chapman Avenue to junction California Highway 55 (near Atwood) and return over the same route; (51) from junction California Highways 18 and 55 (near Olive) over California Highway 55 to junction U.S. Highway 101 (near Tustin) and return over the same route; (52) from junction U.S. Highway 395 and Iowa Avenue (near Highgrove) over Iowa Avenue to junction U.S. Highways 395 and 60 (near Riverside) and return over the same route; (53) from junction California Highway 74 and an unnumbered highway (west of Hemet) over unnumbered highway to Winchester and return over the same route, serving all intermediate points served by the Atchison, Topeka, and Santa Fe Railway Co., on the routes specified above; and

(54) Between Santa Ana, Calif., and the U.S. Army Air Corps Replacement Center approximately 6 miles southwest of Santa Ana, as an off-route point in connection with applicant's regular route operations, serving no intermediate points; and (B) between Houston Intercontinental Airport, Dallas Love Field Airport, Dallas-Fort Worth Regional Airport (now under construction), Fort Worth Greater Southwest International Airport, Amarillo Air Terminal, and points in Texas and Oklahoma as follows: (1) Between Fort Worth, Tex., and junction unnumbered highway and U.S. Highway 77 (approximately 7½ miles south of Sanger, Tex.): From Fort Worth over unnumbered highway via Haslet, Justin, Ponder, and Krum, Tex., to junction U.S. Highway 77, and return over the same route. Service is authorized to and from all intermediate points; (2) between Dallas, Tex., and Lubbock, Tex.: From Dallas over U.S. Highway 80 to Fort Worth, Tex., thence over U.S. Highway 377 to Stephenville, Tex., thence over U.S. Highway 67 to Coleman, Tex., thence over U.S. Highway 84 via Abilene, Tex., to Lubbock and return over the same route. Service is authorized to and from all intermediate points; (3) between Coleman, Tex., and Ballinger, Tex.: From Coleman over U.S.

Highway 67 to Ballenger and return over the same route. Service is authorized to and from all intermediate points; (4) between San Angelo, Tex., and junction U.S. Highways 83 and 84 at or near Tuscola, Tex.: From San Angelo over U.S. Highway 67 to Ballenger, Tex., thence over U.S. Highway 83 to junction U.S. Highway 84 and return over the same route. Service is authorized to and from all intermediate points; (5) between Snyder, Tex., and Lamesa, Tex.: From Snyder over Texas Highway 15 to Lamesa and return over the same route. Service is authorized to and from all intermediate points;

(6) Between Lubbock, Tex., and the site of the Government Bomber Air Field, approximately 9 miles west of Lubbock: From Lubbock over Texas Highway 290 to the site of the Government Bomber Air Field and return over the same route. Service is authorized to and from all intermediate points; (7) between Galveston, Tex., and Rosenberg, Tex.: From Galveston, over Texas Highway 6 to junction U.S. Highway 90-A, thence over U.S. Highway 90-A to Rosenberg and return over the same route; (8) between Richmond, Tex., and Thompsons, Tex.: From Richmond over U.S. Highway 90-A to junction unnumbered highway, thence over said unnumbered highway via Crabb and Booth, Tex., to Thompsons and return over the same route; (9) between junction Texas Highway 6 and unnumbered highway east of Duke, Tex., and Duke, Tex.: From junction Texas Highway 6 and unnumbered highway over said unnumbered highway to Duke and return over the same route; (10) between Texas City, Tex., and junction Texas Highway 6 and U.S. Highway 75: From Texas City over Texas Highway 146 to junction U.S. Highway 75 and thence over U.S. Highway 75 to junction Texas Highway 6 and return over the same route; (11) between Houston, Tex., and Alvin, Tex.: From Houston over Texas Highway 35 to Alvin and return over the same route. Service is authorized to and from all intermediate points in (7) through (11) above; (12) between Houston, Tex., and Bellville, Tex.: From Houston over Alternate U.S. Highway 90 to Rosenberg, Tex., and thence over Texas Highway 36 to Bellville and return over the same route. Service is authorized to and from the intermediate points between Rosenberg and Bellville; (13) between Houston, Tex., and Beaumont, Tex., serving no intermediate points: From Houston over U.S. Highway 90 to Beaumont and return over the same route; (14) between Beaumont, Tex., and Longview, Tex., serving all intermediate points: From Beaumont over U.S. Highway 96, via Silsbee, Kirbyville, and San Augustine to Tenaha, Tex., thence over U.S. Highway 59 to Carthage, Tex., thence over Texas Highway 149 to Longview and return over the same route;

(15) Between Dallas, Tex., and Longview, Tex., serving no intermediate points: From Dallas over Interstate Highway 20 to Longview and return over the same route; (16) between

Lamesa, Tex., and Slaton, Tex., and all intermediate points: From Lamesa over U.S. Highway 87 to junction Farm-to-Market Road No. 400 north of Tahoka, Tex., thence over Farm-to-Market Road No. 400 to junction U.S. Highway 84, thence over U.S. Highway 84 to Slaton and return over the same route; (17) between Brownwood, Tex., and Bellville, Tex., serving all intermediate points: From Brownwood, Tex., over U.S. Highway 84-183 to Goldthwaite, Tex., thence over U.S. Highway 183 to Lometa, Tex., thence over U.S. Highway 190 to junction U.S. Highway 81, 1 mile south of Belton, Tex., thence over U.S. Highway 81 to Temple, Tex., thence over Texas Highway 36 to Bellville and return over the same route; (18) between Houston, Tex., and Brenham, Tex., as an alternate route for operating convenience only; serving no intermediate points: From Houston over U.S. Highway 290 to Brenham and return over the same route; (19) between Lubbock, Tex., and Amarillo, Tex., serving all intermediate points: From Lubbock over U.S. Highway 87 to Amarillo and return over the same route; (20) between Lubbock, Tex., and Seagraves, Tex., serving all intermediate points: From Lubbock over U.S. Highway 62 to Seagraves and return over the same route;

(21) Between Fort Worth, Tex., and Temple, Tex., serving all intermediate points: From Fort Worth over U.S. Highway 81 to junction Texas Highway 174, thence over Texas Highway 174 to junction Texas Highway 6, thence over Texas Highway 6 to junction Texas Highway 317, thence over Texas Highway 317 to Texas Highway 36, thence over Texas Highway 36 to Temple and return over the same route; (22) between Cleburne, Tex., and Dallas, Tex., serving all intermediate points: From Cleburne over U.S. Highway 67 to Dallas and return over the same route; (23) between junction Texas Highways 67 and 174 and Blum, Tex., serving all intermediate points: From junction Texas Highways 67 and 174 over Texas Highway 174 to junction unnumbered highway, thence over unnumbered highway to Blum and return over the same route; (24) between junction Texas Highway 174 and Texas Spur Road 1859 and Kopperl, Tex., serving all intermediate points: From junction Texas Highway 174 and Texas Spur Road 1859 over Texas Spur Road 1859 to Kopperl and return over the same route; (25) between junction U.S. Highway 81 and Texas Farm Road 731 and Crowley, Tex., serving all intermediate points: From junction U.S. Highway 81 and Texas Farm Road 731 over Texas Farm Road 731 to Crowley and return over the same route;

(26) between Dallas, Tex., and Sanger, Tex., serving all intermediate points: From Dallas over U.S. Highway 77 to junction Interstate Highway 35E (formerly shown as unnumbered highway), thence over Interstate Highway 35E via Denton, Tex., to junction U.S. Highway 77, thence over U.S. Highway 77 to Sanger and return over the same route;

(27) between Denton, Tex., and Krum, Tex., serving all intermediate points: From Denton over Texas Highway 24 to junction Texas Highway 156 (formerly shown as unnumbered highway), thence over Texas Highway 156 to Krum and return over the same route; (28) between Amarillo, Tex., and Woodward, Okla., serving all intermediate points: From Amarillo, Tex., over U.S. Highway 60 to Texas-Oklahoma State line, thence over Oklahoma Highways 51 and 15 to Woodward and return over the same route;

(29) Between Lubbock, Tex., and Fort Sumner, N. Mex., serving all intermediate points, and the off-route points of the site of the Southwestern Public Service Co. generating plant, located approximately nine and one-half miles north of Amherst, Tex.: From Lubbock over U.S. Highway 84 to Farwell, Tex., thence over U.S. Highway 60 to Fort Sumner and return over the same route; (30) between Lubbock, Tex., and Levelland, Tex., serving all intermediate points: From Lubbock over Texas Highway 116 to Levelland and return over the same route; (31) between Levelland, Tex., and Littlefield, Tex., serving no intermediate points: From Levelland, Tex., over U.S. Highway 385 to Littlefield, Tex., and return over the same route, serving no intermediate points; and (32) between Canyon, Tex., and Farwell, Tex., serving all intermediate points: From Canyon over U.S. Highway 60 to Farwell and return over the same route. Restriction: The service authorized herein is subject to the following conditions: The service to be performed by carrier shall be limited to those shipments which have a prior or subsequent movement by air, by or on behalf of, Santa Fe Air Freight Co. Note: If a hearing is deemed necessary, applicant requests it be held at Chicago, Ill.

No. MC 30844 (Sub-No. 373), filed October 18, 1971. Applicant: KROBLIN REFRIGERATED XPRESS, INC., 2125 Commercial Street, Waterloo, IA 40704. Applicant's representative: Truman A. Stockton, Jr., 1650 Grant Street Building, Denver, Colo. Authority sought to operate as a common carrier, by motor vehicle, over irregular routes, transporting: *Infants and children's clothing and supplies*, from Eldora, Iowa, to points in Alabama, Arkansas, Colorado, Connecticut, Delaware, Florida, Georgia, Illinois, Indiana, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, Virginia, South Carolina, Tennessee, Texas, Vermont, West Virginia, Wisconsin, and the District of Columbia. Note: Common control may be involved. Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Washington, D.C., or Chicago, Ill.

No. MC 30844 (Sub-No. 375), filed October 26, 1971. Applicant: KROBLIN REFRIGERATED XPRESS, INC., 2125

Commercial Street, Waterloo, IA 50704. Applicant's representative: Truman A. Stockton, Jr., 1650 Grant Street Building, Denver, Colo. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Frozen foodstuffs*, from New Hampton, Iowa to points in Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia, and the District of Columbia, restricted to shipments originating at the plantsites and facilities of Kitchens of Sara Lee at New Hampton, Iowa. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. Common control may be involved. If a hearing is deemed necessary, applicant requests it be held at Washington, D.C., or Chicago, Ill.

No. MC 30844 (Sub-No. 376), filed October 26, 1971. Applicant: KROBLIN REFRIGERATED XPRESS, INC., 2125 Commercial Street, Waterloo, IA 50704. Applicant's representative: Truman A. Stockton, Jr., 1650 Grant Street Building, Denver, Colo. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Such materials supplies and ingredients* as are used in the food processing industry, from points in Alabama, Arkansas, Colorado, Connecticut, Delaware, Florida, Georgia, Illinois (except Chicago and commercial zone), Indiana, Kansas, Kentucky, Maine, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, North Carolina, Ohio, Oklahoma, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Vermont, Virginia, West Virginia, and Wisconsin to warehouses and facilities utilized by Kitchens of Sarah Lee in Iowa and Minnesota. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. Common control may be involved. If a hearing is deemed necessary, applicant requests it be held at Washington, D.C., or Chicago, Ill.

No. MC 30844 (Sub-No. 377), filed October 26, 1971. Applicant: KROBLIN REFRIGERATED XPRESS, INC., 2125 Commercial Street, Waterloo, IA 50704. Applicant's representative: Truman A. Stockton, Jr., 1650 Grant Street Building, Denver, Colo. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Frozen foodstuffs*, from New Hampton, Iowa, to points in Illinois on and north of U.S. Highway 36; points in Iowa, Kentucky, Michigan, Minnesota, and Wisconsin, restricted to shipments originating at the plantsites and facilities of Kitchens of Sara Lee at New Hampton, Iowa. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. Common control may be involved. If a hearing is deemed necessary, applicant requests it be held at Washington, D.C., or Chicago, Ill.

No. MC 30844 (Sub-No. 378), filed October 26, 1971. Applicant: KROBLIN REFRIGERATED XPRESS, INC., 2125 Commercial Street, Waterloo, IA 50704. Applicant's representative: Truman A. Stockton, Jr., 1650 Grant Street Building, Denver, Colo. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Frozen foodstuffs*, from New Hampton, Iowa, to points in Alabama, Florida, Georgia, North Carolina, South Carolina, and Tennessee, restricted to shipments originating at the plantsites and facilities of Kitchens of Sara Lee at New Hampton, Iowa. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. Common control may be involved. If a hearing is deemed necessary, applicant requests it be held at Washington, D.C., or Chicago, Ill.

No. MC 30844 (Sub-No. 379), filed November 1, 1971. Applicant: KROBLIN REFRIGERATED XPRESS, INC., 2125 Commercial Street, Waterloo, IA 50704. Applicant's representative: Truman A. Stockton, Jr., 1650 Grant Street Building, Denver, Colo. 80203. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Meats, meat products, and meat byproducts and articles distributed by meat packinghouses* as described in sections A, B, and C of appendix 1 to the report in *Descriptions in Motor Carrier Certificates*, 61 M.C.C. 209 and 766 (except hides and commodities in bulk), from the plantsite and warehouse facilities utilized by Wilson Certified Foods, Inc., at Oklahoma City, Okla., to points in Massachusetts, Rhode Island, Connecticut, Michigan, New York, New Jersey, Delaware, Maryland, District of Columbia, and Chicago, Ill. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. Common control may be involved. Applicant states the purpose of this application is for gateway elimination and circuitous miles. If a hearing is deemed necessary, applicant requests it be held at Washington, D.C., or Chicago, Ill.

No. MC 55822 (Sub-No. 12) (Amendment), filed September 22, 1971, published in the FEDERAL REGISTER issue of October 21, 1971, and republished in part as amended this issue. Applicant: VICTORY EXPRESS, INC., 2600 Willowburn Avenue, Dayton, OH 45427. Applicant's representative: Harold G. Hernly, Jr., Arlington, VA 22201. NOTE: The purpose of this partial republication is to add Dayton, Ohio, as an origin point in addition to Palatka, Fla. The rest of the application remains as previously published.

No. MC 72442 (Sub-No. 36) (Correction), filed October 4, 1971, published in the FEDERAL REGISTER issue of November 4, 1971, and republished in part as corrected this issue. Applicant: AKERS MOTOR LINES, INCORPORATED, Post Office Box 579, Gastonia, NC 28052. Applicant's representative: Paul M. Daniell, Post Office Box 872, Atlanta, GA 30301.

NOTE: The sole purpose of this partial republication is to correctly reflect the location of the PPG Industries, Inc., plantsite as being at or near Mount Holly Springs, Pa., in lieu of Holly Springs, Pa., which was inadvertently shown in the original publication. The rest of the application remains as previously published.

No. MC 73688 (Sub-No. 51), filed October 21, 1971. Applicant: SOUTHERN TRUCKING CORPORATION, 1500 Orenda Avenue, Post Office Box 7182, Memphis, TN 38107. Applicant's representative: Charles H. Hudson, Jr., 601 Stahlman Building, Nashville, Tenn. 37201. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: (1) *Iron and steel and iron and steel articles*, between Newport, Ark., on the one hand, and, on the other, points in Iowa, Kansas, Missouri, Illinois, Indiana, Alabama, Kentucky, Tennessee, Arkansas, Oklahoma, Texas, Louisiana, Mississippi, Georgia, and Ohio; and (2) *materials, equipment, and supplies* used in the manufacturing, sale, and distribution of iron and steel articles, from points in Iowa, Kansas, Mississippi, Missouri, Illinois, Indiana, Alabama, Kentucky, Tennessee, Arkansas, Oklahoma, Texas, Louisiana, Georgia, and Ohio, to Newport, Ark. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Little Rock, Ark., or Memphis, Tenn.

No. MC 74647 (Sub-No. 13), filed October 15, 1971. Applicant: PASCO SALVINO, doing business as P. SALVINO TRANSPORT, 6615 Corson Avenue South, Seattle, WA 98108. Applicant's representative: Joseph O. Earp, 411 Lyon Building, Seattle, WA 98104. Authority sought to operate as a *contract carrier*, by motor vehicle, over irregular routes, transporting: *Paper or pulpboard*, not corrugated, from Tacoma, Wash., to Canby, Oreg., under contract with Container Corp. of America. NOTE: If a hearing is deemed necessary, applicant requests it be held at Seattle, Wash.

No. MC 82492 (Sub-No. 61), filed October 19, 1971. Applicant: MICHIGAN & NEBRASKA TRANSIT CO., INC., 2109 Olmstead Road, Kalamazoo, MI 49003. Applicant's representative: William C. Harris, Post Office Box 2853, Kalamazoo, MI 49003. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Meats, meat products and meat byproducts, and articles distributed by meat packinghouses* as described in sections A and C of appendix 1 to the report in *Descriptions in Motor Carrier Certificates*, 61 M.C.C. 209 and 766 (except hides and commodities in bulk), from Fremont and Omaha, Nebr., to Covington and Louisville, Ky., and points in Indiana, Michigan, and Ohio, restricted to traffic originating at the named origins and destined to the named destination territory. NOTE: Common control may be involved. If a hearing is deemed necessary, applicant requests it be held at Omaha, Nebr.

No. MC 82841 (Sub-No. 86), filed October 22, 1971. Applicant: HUNT TRANSPORTATION, INC., 801 Livestock Exchange Building, Omaha, Nebr. 68107. Applicant's representative: Donald L. Stern, 530 Univac Building, 7100 West Center Road, Omaha, NE 68106. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Foundry equipment*, from Kewanee, Ill., to points in Alabama, Arkansas, California, Indiana, Iowa, Kentucky, Massachusetts, Michigan, New York, Ohio, Pennsylvania, Tennessee, Texas, and Wisconsin. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Chicago, Ill., or Omaha, Nebr.

No. MC 82841 (Sub-No. 87), filed October 22, 1971. Applicant: HUNT TRANSPORTATION, INC., 801 Livestock Exchange Building, Omaha, Nebr. 68107. Applicant's representative: Donald L. Stern, 530 Univac Building, 7100 West Center Road, Omaha, NE 68106. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Agricultural machinery and parts and self-propelled sanitary equipment and parts*, from Clarion, Iowa, to points in the United States including the District of Columbia (excluding Alaska and Hawaii). Restriction: Restricted to traffic originating at Hagie Manufacturing Co. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Omaha, Nebr., or Des Moines, Iowa.

No. MC 83539 (Sub-No. 320), filed October 18, 1971. Applicant: C & H TRANSPORTATION CO., INC., 1935-2010 West Commerce Street, Post Office Box 5976, Dallas, TX 75222. Applicant's representative: Thomas E. James (same address as above). Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Particleboard*, from Diboll, Tex., to points in Arkansas, Delaware, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Michigan, Minnesota, Missouri, Nebraska, New Jersey, New Mexico, New York, Ohio, Oklahoma, Pennsylvania, Tennessee, Virginia, West Virginia, Wisconsin, and the District of Columbia. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. Common control may be involved. If a hearing is deemed necessary, applicant requests it be held at Dallas, Tex.

No. MC 87720 (Sub-No. 117), filed October 18, 1971. Applicant: BASS TRANSPORTATION CO., INC., Old Croton Road, Flemington, N.J. 08822. Applicant's representative: Bert Collins, 140 Cedar Street, New York, NY 10006. Authority sought to operate as a *contract carrier*, by motor vehicle, over irregular routes, transporting: (1) *Plastic film and sheeting*, from Nixon, N.J., to points in Maine, Vermont, New Hampshire, Ohio, Illinois, Indiana, Michigan, Iowa, Min-

nesota, Arkansas, Missouri, Wisconsin, Kansas, Oklahoma, Georgia, North Carolina, South Carolina, Texas, Nebraska, Louisiana, Mississippi, Alabama, Florida, Tennessee, and Kentucky; and (2) materials and supplies used in the manufacture and sale of the above commodities (except in bulk), from the above-described destination territory to Nixon, N.J., and returned and rejected shipments in the reverse direction. Restriction: The proposed service to be under contract with Tenneco Chemicals, Inc., a subsidiary of Tenneco, Inc. NOTE: Applicant has common carrier authority pending under MC 135684 Sub 1. NOTE: If a hearing is deemed necessary, applicant requests it be held at Washington, D.C.

No. MC 88161 (Sub-No. 85), filed October 25, 1971. Applicant: INLAND TRANSPORTATION CO., INC., 6737 Corson Avenue South, Seattle, WA 98108. Applicant's representative: Stephen A. Cole (same address as applicant). Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Formaldehyde, resins, and methanol, liquid*, in bulk, in tank vehicles, from points in Missoula County, Mont., to points in Idaho. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Seattle or Spokane, Wash.

No. MC 100666 (Sub-No. 203), filed October 25, 1971. Applicant: MELTON TRUCK LINES, INC., Post Office Box 7666, Shreveport, LA 71107. Applicant's representative: Wilburn L. Williamson, 280 National Foundation Life, 3535 Northwest 58th, Oklahoma City, OK 73112. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Urethane and urethane products, urethane roofing and insulation, and materials*, used in the installation thereof, from the plantsite of the Philip Carey Co., Division of Panaco Corp., at or near Elizabethtown, Ky., to points in Alabama, Arkansas, Colorado, Florida, Georgia, Iowa, Kansas, Louisiana, Mississippi, Missouri, Nebraska, North Carolina, North Dakota, Oklahoma, South Carolina, South Dakota, Tennessee, and Texas. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Cincinnati, Ohio, or Louisville, Ky.

No. MC 106398 (Sub-No. 562), filed October 25, 1971. Applicant: NATIONAL TRAILER CONVOY, INC., 1925 National Plaza, Tulsa, OK 74151. Applicant's representative: Leonard A. Jaskiewicz, 1730 M Street NW., Suite 501, Washington, DC 20036. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Trailers*, designed to be drawn by passenger automobiles, in initial movements, from Izard County, Ark., to points in the United States (except Alaska and Hawaii). NOTE: Applicant states that the requested authority cannot

be tacked with its existing authority. Common control and dual operations may be involved. If a hearing is deemed necessary, applicant requests it be held at Memphis, Tenn.

No. MC 106920 (Sub-No. 41), filed October 18, 1971. Applicant: RIGGS FOOD EXPRESS, INC., Post Office Box 26, West Monroe Street, New Bremen, OH 45869. Applicant's representative: Carroll V. Lewis, 122 East North Street, Sidney, OH 45365. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Frozen foods*, from Mattoon, Ill., to points in Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia, and the District of Columbia, restricted to traffic originating at Mattoon, Ill., and destined to the above-named destination points. NOTE: Common control may be involved. If a hearing is deemed necessary, applicant requests it be held at Chicago, Ill., or Washington, D.C.

No. MC 107002 (Sub-No. 411), filed October 14, 1971. Applicant: MILLER TRANSPORTERS, INC., Post Office Box 1123, U.S. Highway 80 West, Jackson, MS 39205. Applicant's representative: H. D. Miller, Jr., Post Office Box 22567, Jackson, MS 39205. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Petroleum and petroleum products*, in bulk, in tank vehicles, from Tuscaloosa, Ala., to points in Georgia, North Carolina, South Carolina, and Tennessee. NOTE: Applicant states no duplicate authority is sought. It further states that although tacking would be possible at Memphis, Tenn., applicant can presently render the same service over direct routes by combining presently held authorities. If a hearing is deemed necessary, applicant requests it be held at Birmingham, Ala.

No. MC 108207 (Sub-No. 336), filed October 1, 1971. Applicant: FROZEN FOOD EXPRESS, 318 Cadiz Street, 75207, Post Office Box 5888, Dallas, TX 75222. Applicant's representative: J. B. Ham (same address as applicant). Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Meat, meat products, meat byproducts, and articles distributed by meat packinghouses*, as described in sections A and C of appendix 1 to the report in *Descriptions in Motor Carrier Certificates* 61 M.C.C. 209 and 766, from New Orleans, La., to points in Mississippi. NOTE: Applicant states it proposes to tack with its Sub 12 to perform a through service to points in Mississippi, New Orleans, and Louisiana. If a hearing is deemed necessary, applicant requests it be held at New Orleans, La., or Fort Worth, Tex.

No. MC 108207 (Sub-No. 337), filed October 18, 1971. Applicant: FROZEN FOOD EXPRESS, INC., 318 Cadiz Street, Post Office Box 5888, Dallas, TX 75222. Applicant's representative: J. B. Ham (same address as applicant). Authority sought to operate as a *common carrier*,

by motor vehicle, over irregular routes, transporting: *Foodstuffs*, from points in New Mexico to points in Arizona and California. **NOTE:** Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Santa Fe, N. Mex., or Fort Worth, Tex.

No. MC 108340 (Sub-No. 23), filed November 1, 1971. Applicant: HANEY TRUCK LINE, a corporation, 2219 Cedar Street, Forest Grove, OR. Applicant's representative: Lawrence V. Smart, Jr., 419 Northwest 23d Avenue, Portland, OR 97210. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Pipe, culvert, highway guard rail, and fittings and hardware therefor*, from points in Washington County, Oreg., to points in and north of Mendocino Lake, Colusa, Sutter, and Placer Counties, Calif. **NOTE:** Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Portland, Oreg.

No. MC 108449 (Sub-No. 334), filed October 22, 1971. Applicant: INDIAN-HEAD TRUCK LINE, INC., 1947 West County Road C, St. Paul, MN 55113. Applicant's representative: W. A. Myllenebeck (same address as above). Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Commodities*, in bulk, having an immediate prior or subsequent movement over the lines of the Chicago and Northwestern Railway, between points in Illinois, Iowa, Kansas, Upper Michigan, Minnesota, Nebraska, North Dakota, South Dakota, Wisconsin, Missouri, and Wyoming. **NOTE:** Applicant states that the requested authority can be tacked with its existing authority but indicates that it has no present intention to tack and therefore does not identify the points or territories which can be served through tacking. Persons interested in the tacking possibilities are cautioned that failure to oppose the application may result in an unrestricted grant of authority. If a hearing is deemed necessary, applicant requests it be held at Chicago, Ill., or Minneapolis, Minn.

No. MC 108703 (Sub-No. 26), filed October 29, 1971. Applicant: LEE & EASTES TANK LINES, INC., 2418 Airport Way South, Seattle, WA 98134. Applicant's representative: Jerrold L. Sharp (same address as applicant). Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Residual fuel oil, road oil, dust oil and asphalt*, in bulk, in tank vehicles, from Spokane, Wash., to points in that part of Idaho in and north of the southern boundary of Idaho County. **NOTE:** Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Washington, D.C.

No. MC 108835 (Sub-No. 20), filed October 6, 1971. Applicant: HYMAN FREIGHTWAYS, INC., 2690 Prior Avenue North, St. Paul, MN 55113. Applicant's representative: William S. Rosen, 630 Osborn Building, St. Paul, Minn. 55102. Authority sought to operate as a *common carrier*, by motor vehicle, over regular routes, transporting: *General commodities* (except those of unusual value, high explosives, household goods as defined by the Commission, commodities in bulk, commodities requiring special equipment and those injurious or contaminating to other lading), between Watertown and Sioux Falls, S. Dak., with service authorized at the intermediate point of Brookings, S. Dak., over the following routes: (1) From Watertown, over U.S. Highway 212 to junction with Interstate Highway 29; thence over Interstate Highway 29 to Sioux Falls, S. Dak., and return over the same route; and (2) from Watertown, S. Dak., over U.S. Highway 81 to junction with U.S. Highway 14, thence over U.S. Highway 14 to Brookings, S. Dak., thence over Interstate Highway 29 to Sioux Falls, S. Dak., and return over the same route. **NOTE:** If a hearing is deemed necessary, applicant requests it be held at Minneapolis, Minn., or Sioux Falls, S. Dak.

No. MC 110098 (Sub-No. 120), filed October 26, 1971. Applicant: ZERO REFRIGERATED LINES, a corporation, 1400 Ackerman Road, Post Office Box 20380, San Antonio, TX 78220. Applicant's representative: Donald L. Stern, 530 Univac Building, 7100 West Center Road, Omaha, NE 68106. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Meats, meat products, meat byproducts, and articles distributed by meat packinghouses*, as described in sections A and C of appendix I to the report in *Descriptions in Motor Carrier Certificates*, 61 M.C.C. 209 and 766 (except hides and commodities in bulk), from Waterloo and Columbus Junction, Iowa, to points in Oklahoma, restricted to traffic originating at Waterloo and Columbus Junction, Iowa. **NOTE:** Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Omaha, Nebr., or Des Moines, Iowa.

No. MC 110525 (Sub-No. 1021), filed October 29, 1971. Applicant: CHEMICAL LEAMAN TANK LINES, INC., 520 East Lancaster Avenue, Downingtown, PA 19335. Applicant's representative: Thomas J. O'Brien (same address as above). Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Muriatic acid*, in bulk, in tank vehicles, from Fort Worth, Tex., to Healdton, Okla. **NOTE:** Applicant states that the requested authority can be tacked with its existing authority but indicates that it has no present intention to tack and therefore does not identify the points or territories which can be served through tacking. Persons interested in the tacking possi-

bilities are cautioned that failure to oppose the application may result in an unrestricted grant of authority. If a hearing is deemed necessary, applicant requests it be held at Washington, D.C., or Fort Worth, Tex.

No. MC 113267 (Sub-No. 274), filed October 20, 1971. Applicant: CENTRAL & SOUTHERN TRUCK LINES, INC., 312 West Morris Street, Caseyville, IL 62232. Applicant's representative: Lawrence A. Fischer (same address as applicant). Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Bags and bagging*, from Nashville, Tenn., to points in Illinois, Wisconsin, Minnesota, Iowa, Missouri, Kansas, and Nebraska. **NOTE:** Common control may be involved. Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at St. Louis, Mo., or Nashville, Tenn.

No. MC 113362 (Sub-No. 224), filed October 26, 1971. Applicant: ELLSWORTH FREIGHT LINES, INC., 310 East Broadway, Eagle Grove, IA 50533. Applicant's representative: Milton D. Adams, 1105½ Eighth Avenue NE., Box 562, Austin, MN 55912. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Meat, meat products, meat byproducts and articles distributed by meat packinghouses* (except hides and commodities in bulk), as defined in sections A and C of appendix 1 to the report in *Descriptions in Motor Carrier Certificates*, 61 M.C.C. 209 and 766, from the plantsite and storage facilities utilized by Wilson Sinclair Co., located at Des Moines, Iowa, to points in Indiana, Michigan, and Ohio. Restriction: Restricted to the transportation of traffic originating at the named origin and destined to the named destinations. **NOTE:** If a hearing is deemed necessary, applicant requests it be held at Chicago, Ill., or Des Moines, Iowa.

No. MC 113362 (Sub-No. 225), filed October 29, 1971. Applicant: ELLSWORTH FREIGHT LINES, INC., 310 East Broadway, Eagle Grove, IA 50533. Applicant's representative: Milton D. Adams, 1105½ Eighth Street NE., Box 562, Austin, MN 55912. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Frozen foodstuffs*, from New Hampton, Iowa, to points in Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia, and the District of Columbia, restricted to shipments originating at the plantsites and facilities of Kitchens of Sara Lee at New Hampton, Iowa. **NOTE:** Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Chicago, Ill.

No. MC 113495 (Sub-No. 52), filed October 26, 1971. Applicant: GREGORY

HEAVY HAULERS, INC., 51 Oldham Street, Post Office Box 60628, Nashville, TN 37206. Applicant's representative: Wilmer B. Hill, 705 McLachlen Bank Building, 666 11th Street NW., Washington, DC 20001. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Contractors' machinery and equipment*, not limited to such commodities as are intended solely for use by contractors, between points in Alabama, Florida, Georgia, North Carolina, South Carolina, and Tennessee. NOTE: Applicant states that the requested authority can be tacked with its existing authority but indicates that it has no present intention to tack and therefore does not identify the points or territories which can be served through tacking. Persons interested in the tacking possibilities are cautioned that failure to oppose the application may result in an unrestricted grant of authority. No duplicating authority is sought. If a hearing is deemed necessary, applicant requests it be held at Atlanta, Ga., or Washington, D.C.

No. MC 113535 (Sub-No. 23), filed October 18, 1971. Applicant: A & W TRUCKING CO., INC., Route 5, Box 900, Mosinee, WI 54455. Applicant's representative: John J. Altenburg (same address as applicant). Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Meats, meat products and meat by-products, articles distributed by meat packinghouses, and such commodities* as are used by meatpackers in the conduct of their business when destined to and for use by meatpackers as defined by the Commission (except commodities in bulk in tank vehicles, and hides), between plant and warehouse facilities of the Dubuque Packing Co., Dubuque, Iowa, and Duluth, Minn.; and (2) from points in Wisconsin to Dubuque, Iowa. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Minneapolis or St. Paul, Minn.

No. MC 113678 (Sub-No. 441), filed October 25, 1971. Applicant: CURTIS, INC., Post Office Box 16004, Stockyard Station, Denver, CO 80216. Applicant's representative: Duane W. Acklie, 521 South 14th, Lincoln, NE 68501. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Frozen foods*, from Mattoon, Ill., to points in Arizona, California, Colorado, Kansas, New Mexico, Nevada, Oklahoma, Texas, Utah, and Washington, restricted to traffic originating at Mattoon, Ill., and destined to the States named. NOTE: If a hearing is deemed necessary, applicant requests it be held at Chicago, Ill., or Denver, Colo.

No. MC 113843 (Sub-No. 177), filed October 18, 1971. Applicant: REFRIGERATED FOOD EXPRESS, INC., 316 Summer Street, Boston, MA 02210. Applicant's representative: Lawrence T. Shells (same address as applicant). Authority sought to operate as a *common*

carrier, by motor vehicle, over irregular routes, transporting: *Frozen meat*, from Wilmington, Del., to points in Colorado, Connecticut, Illinois, Indiana, Iowa, Kansas, Kentucky, Maine, Massachusetts, Michigan, Minnesota, Missouri, Nebraska, New Hampshire, New York, Ohio, Oklahoma, Pennsylvania, Rhode Island, Vermont, Wisconsin, and the District of Columbia. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. Common control may be involved. If a hearing is deemed necessary, applicant requests it be held at Boston, Mass.

No. MC 114004 (Sub-No. 112), filed October 18, 1971. Applicant: CHANDLER TRAILER CONVOY, INC., 8828 New Benton Highway, Little Rock, AR 72209. Applicant's representative: Winston Chandler, Jr. (same address as applicant). Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting (1) *Trailers* designed to be drawn by passenger automobiles and *buildings*, in sections, mounted on wheeled undercarriages in initial movements, from points in Charlotte County, Va., to points in the United States (including Alaska, but excluding Hawaii), and (2) *buildings*, in sections, mounted on wheeled undercarriages in initial movements, from points in Mecklenburg County (except South Hill), Va., to points in the United States (including Alaska, but excluding Hawaii). NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Richmond, Va.

No. MC 114106 (Sub-No. 87), filed October 22, 1971. Applicant: MAYBELLE TRANSPORT COMPANY, a corporation, Box 849, Lexington, NC 27292. Applicant's representative: Robert M. Slaty, 1819 H Street NW., Washington, DC 20006. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Hydrated alumina*, from King Creek, S.C., to points in Georgia, North Carolina, South Carolina, and Virginia. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. Applicant holds contract carrier authority under MC 115176 and subs, therefore dual operations may be involved. Common control may also be involved. If a hearing is deemed necessary, applicant requests it be held at Washington, D.C.

No. MC 114211 (Sub-No. 160) (Correction), filed September 16, 1971, published in the FEDERAL REGISTER issue of October 15, 1971, and republished in part as corrected this issue. Applicant: WARREN TRANSPORT, INC., 324 Manhard, Post Office Box 420, Waterloo, IA 50704. Applicant's representative: Charles W. Singer, Suite 1625, 33 North Dearborn, Chicago, IL 60602. NOTE: The sole purpose of this partial republication is to reflect the correct docket number as MC 114211 (Sub-No. 160) in lieu of MC 114211 (Sub-No. 16) as erroneously shown in the original publication. The

rest of the application remains as previously published.

No. MC 114274 (Sub-No. 17), filed October 14, 1971. Applicant: VITALIS TRUCK LINES, INC., 137 Northeast 48th Street Place, Des Moines, IA 50306. Applicant's representative: William H. Towle, 127 North Dearborn Street, Chicago, IL 60602. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Frozen foodstuffs*, from Omaha, Nebr., to points in Illinois, Indiana, Michigan, Missouri, Ohio, and Wisconsin. NOTE: Applicant states that the requested authority can be tacked with its existing authority but indicates that it has no present intention to tack and therefore does not identify the points or territories that can be served through tacking. Persons interested in the tacking possibilities are cautioned that failure to oppose the application may result in an unrestricted grant of authority. If a hearing is deemed necessary, applicant requests it be held at Chicago, Ill., or Omaha, Nebr.

No. MC 114312 (Sub-No. 23), filed October 29, 1971. Applicant: ABBOTT TRUCKING, INC., Route 3, Delta, OH 43515. Applicant's representative: A. Charles Tell, 10 East Broad Street, Columbus, OH 43215. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: (1) *Fertilizer, fertilizer materials, fertilizer ingredients*; (2) *herbicides, insecticides, and pesticides* moving in mixed shipments with the commodities in (1) above from Toledo, Ohio, to points in Iowa, Kentucky, Maryland, Minnesota, Missouri, and New Jersey; and (3) *soybean meal*, from Bellevue and Pistoria, Ohio, to points in the Lower Peninsula of Michigan. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Columbus, Ohio, or Washington, D.C.

No. MC 115841 (Sub-No. 418), filed October 14, 1971. Applicant: COLONIAL REFRIGERATED TRANSPORTATION, INC., 1215 Bankhead Highway West, Birmingham, AL 35204. Applicant's representative: E. Stephen Heisley, 666 11th Street NW., Washington, DC 20001. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Foodstuffs* (except commodities in bulk), in vehicles equipped with mechanical refrigeration, from Cleveland, Ohio, to points in California. NOTE: Common control may be involved. Applicant states that the requested authority can be tacked with its existing authority, but indicates that it has no present intention to tack and does not identify the points or territories which can be served through tacking. Persons interested in the tacking possibilities are cautioned that failure to oppose the application may result in an unrestricted grant of authority. If a hearing is deemed necessary, applicant requests it be held at Cleveland, Ohio, Detroit, Mich., or Washington, D.C.

No. MC 116014 (Sub-No. 56), filed October 18, 1971. Applicant: OLIVER TRUCKING COMPANY, INC., Post Office Box 53, also: Lexington Road, Winchester, KY 40391. Applicant's representative: Louis J. Amato, Post Office Box E, Bowling Green, KY 42101. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: (1) *Plywood and plywood faced or finished with decorative or protective material*; and (2) *materials, accessories and supplies* (except commodities in bulk), used in the installation of the commodities in (1) above, from Wilmington, N.C., to points in Arkansas, Indiana, Illinois, Kentucky, Maryland, New Jersey, New York, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Louisville, Ky., or Raleigh, N.C.

No. MC 116073 (Sub-No. 204), filed October 18, 1971. Applicant: BARRETT MOBILE HOME TRANSPORT, INC., Post Office Box 919, Moorhead, MN 56560. Applicant's representative: Robert G. Tassar, 1819 Fourth Avenue South, Kegel Plaza, Moorhead, MN 56560. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Fiberglass panels and fiberglass polyurethane foam sandwich panels for modular sectional buildings*, from Pasco, Wash., to points in Washington, Oregon, California, Idaho, Nevada, Arizona, New Mexico, North Dakota, South Dakota, Colorado, Montana, and Texas. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Seattle, Wash.

No. MC 116073 (Sub-No. 205), filed October 18, 1971. Applicant: BARRETT MOBILE HOME TRANSPORT, INC., Post Office Box 919, Moorhead, MN 56560. Applicant's representative: Robert G. Tassar, 1819 Fourth Avenue South, Kegel Plaza, Moorhead, MN 56560. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Trailers designed to be drawn by passenger automobiles*, from Orange County, N.C., to points in the United States (except Alaska and Hawaii). NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Raleigh, N.C.

No. MC 116073 (Sub-No. 206), filed October 29, 1971. Applicant: BARRETT MOBILE HOME TRANSPORT, INC., 1825 Main Avenue, Post Office Box 919, Moorhead, MN 56560. Applicant's representative: Robert G. Tassar, 1819 Fourth Avenue South, Kegel Plaza, Moorhead, MN 56560. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *modular homes*, from Port Orchard, Wash., to points in Washington, Oregon, Idaho, and Montana. NOTE: Applicant

states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Seattle, Wash.

No. MC 116110 (Sub-No. 10), filed October 15, 1971. Applicant: P. C. WHITE TRUCK LINE, INC., Murray Road at Loftin Road, Post Office Box 1488, Dothan, AL 36301. Applicant's representative: Robert S. Richard, 57 Adams Avenue, Post Office Box 2069, Montgomery, AL 36103. Authority sought to operate as a *common carrier*, by motor vehicle, over regular routes, transporting: *General commodities* (except classes A and B explosives, household goods as defined by the Commission, commodities in bulk, and those requiring special equipment), between Montgomery, Ala., and Atlanta, Ga., over Interstate Highway 85, serving points within 15 miles of Montgomery, Ala., and Atlanta, Ga., as intermediate and off-route points (also over U.S. Highway 29 between Atlanta, Ga., and Tuskegee, Ala., and U.S. Highway 80 between Tuskegee and Montgomery, Ala.), serving no intermediate points. NOTE: If a hearing is deemed necessary, applicant requests it be held at Montgomery, Ala., and Atlanta, Ga.

No. MC 117940 (Sub-No. 71), filed October 26, 1971. Applicant: NATIONWIDE CARRIERS, INC., Post Office Box 104, Maple Plain, MN 55359. Applicant's representative: Donald L. Stern, 530 Univac Building, Omaha, Nebr. 68106. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Frozen foods and canned foods* (except dairy products), as described in section B of appendix I to the report in *Descriptions in Motor Carrier certificates*, 61 M.C.C. 209, from points in Minnesota, to points in Arkansas, Kansas, Missouri, Oklahoma, and Texas. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at St. Paul, Minn.

No. MC 118292 (Sub-No. 26), filed October 20, 1971. Applicant: BALLENTINE PRODUCE, INC., Box 312, Alma, AR 72921. Applicant's representative: Nancy Pyeatt, 1030 15th Street NW, Washington, DC 20005. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: (1) *Foodstuffs*, from St. James, Madelia, and Butterfield, Minn., and Estherville, Iowa, to points in Alabama, Arizona, Arkansas, California, Colorado, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Michigan, Minnesota, Mississippi, Montana, Missouri, Nebraska, Nevada, New Mexico, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, South Carolina, Tennessee, Texas, Utah, Washington, Wisconsin, and Wyoming, and (2) *materials, supplies, and equipment* used or useful in the preparation, packing, and sale of these commodities, from the above-named States, to St. James, Madelia, and Butterfield, Minn., and Estherville, Iowa. NOTE: Applicant states that the requested authority can be

tacked with its existing authority but indicates that it has no present intention to tack and therefore does not identify the points or territories which can be served through tacking. Persons interested in the tacking possibilities are cautioned that failure to oppose the application may result in an unrestricted grant of authority. If a hearing is deemed necessary, applicant requests it be held at Minneapolis, Minn., or Washington, D.C.

No. MC 118959 (Sub-No. 99), filed October 18, 1971. Applicant: JERRY LIPPS, INC., 130 South Frederick, Cape Girardeau, MO 63701. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Plastic, plastic products and pipe and materials, equipment and supplies* used in the manufacture of plastics, plastic products and pipe, (1) between Glenville, W. Va., on the one hand, and, on the other, points in Florida, Georgia, Idaho, Pennsylvania, and Wisconsin and (2) between Fayetteville, W. Va., on the one hand, and, on the other, points in Florida, Georgia, Idaho, Pennsylvania, and Wisconsin. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. Applicant holds contract carrier authority under MC 125664, therefore, dual operations may be involved. If a hearing is deemed necessary, applicant requests it be held at Charleston, W. Va., or Pittsburgh, Pa.

No. MC 119630 (Sub-No. 10), filed October 20, 1971. Applicant: VAN TASEL, INCORPORATED, Fifth and Grand, Pittsburg, Kans. 66762. Applicant's representative: Wilburn L. Williamson, 280 National Foundation Life Center, 3535 Northwest 58th, Oklahoma City, OK 73112. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Plastic pipe, plastic conduit, vinyl plastic siding and extruded plastic products*, from Pittsburg, Kans., to points in the United States (except Alaska and Hawaii). NOTE: Applicant holds contract carrier authority under MC 115036 therefore dual operations may be involved. Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Tulsa, Okla., or Wichita, Kans.

No. MC 119669 (Sub-No. 29), filed October 26, 1971. Applicant: TEMPCO TRANSPORTATION, INC., 546 South 31 A, Columbus, IN 47201. Applicant's representative: Jack H. Blanshan, 29 South La Salle Street, Chicago, IL 60603. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Prepared flour, prepared flour mixes, frosting mixes and icing mixes*, from Chelsea, Mich., to points in Arkansas, Louisiana, Mississippi, Oklahoma, Tennessee, and Texas. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing

is deemed necessary, applicant requests it be held at Chicago, Ill.

No. MC 119774 (Sub-No. 34), filed October 26, 1971. Applicant: MARY ELLEN STIDHAM, N. M. STIDHAM, A. E. MANKINS (INEZ MANKINS, EXECUTRIX), AND JAMES E. MANKINS, SR., a partnership doing business as EAGLE TRUCKING COMPANY, Post Office Box 471, Kilgore, TX 75662. Applicant's representative: Bernard H. English, 6270 Firth Road, Fort Worth, TX 76116. Authority sought to operate as a common carrier, by motor vehicle, over irregular routes, transporting: *Iron and steel articles, and materials, equipment, and supplies* used in the manufacture of iron and steel articles, between Newport, Ark., and points within 5 miles thereof, and Hope, Ark., and points within 5 miles thereof, on the one hand, and, on the other, all points in the United States (except Alaska and Hawaii). NOTE: Applicant states that it proposes to tack at points in Arkansas with presently held authorities in its Subs- 1, 2, 3, 11, and 16 to provide a through service. No duplicating authority is sought. If a hearing is deemed necessary, applicant requests it be held at Little Rock, Ark., Shreveport, La., or Dallas, Tex.

No. MC 119777 (Sub-No. 229), filed October 25, 1971. Applicant: LIGON SPECIALIZED HAULER, INC., Post Office Drawer L, Highway 85 East, Madisonville, KY 42431. Applicant's representative: Ronald E. Butler, Box 477, Madisonville, KY 42431. Authority sought to operate as a common carrier, by motor vehicle, over irregular routes, transporting: *Poultry, eggs, and livestock supplies and equipment*, from Athens, Ga., to points in the United States (except Alaska and Hawaii). NOTE: Applicant holds contract carrier authority under MC 129670, therefore dual operations and common control may be involved. Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Louisville, Ky., or St. Louis, Mo.

No. MC 120728 (Sub-No. 2), filed October 20, 1971. Applicant: MOJAVE TRANSPORTATION CO., a corporation, 14410 South Avalon Boulevard, Gardena, CA 90247. Applicant's representative: Martin J. Rosen, 140 Montgomery Street, San Francisco, CA 94104. Authority sought to operate as a common carrier, by motor vehicle, over regular and irregular routes, transporting: (A) *Property necessary or incidental to the establishment, maintenance, or dismantling of oil, gas, or water well, pipelines, refineries, and cracking or gasing-head plants, equipment and material used in construction and equipment used in farming* (1) Regular routes: Between the Oregon-California State line and California-Mexico State line, from the Oregon-California State line over U.S. Highway 101 and U.S. Highway 101 Bypass to junction Interstate Highway 5, thence over Interstate Highway 5 to the California-Mexico State line; (2) be-

tween Oregon-California State line and the Mexican Border, from Oregon-California State line over California Highway 99 to junction Interstate Highway 5, thence over Interstate Highway 5 to the Mexican Border; (3) between Redding and Alturas, Calif., over U.S. Highway 299; (4) between the Oregon-California State line and the California Nevada State line, via Alturas and Johnstonville over U.S. Highway 395; (5) between junction California Highway 99 near Red Buff, Calif., and junction U.S. Highway 395 at Johnstonville over California Highway 36; (6) between Marysville, Calif., and junction California Highway 20 and Interstate Highway 80, over California Highway 20; (7) between San Francisco, Calif., and California-Nevada State line over Interstate Highway 80; (8) between Sacramento, Calif., and California-Nevada State line over U.S. Highway 50; (9) between the California-Nevada State line at Topaz Lake and junction U.S. Highway 395 and U.S. Highway 66, over U.S. Highway 395;

(10) Between Los Angeles, Calif., and Needles, Calif., over U.S. Highway 66; (11) between Los Angeles, Calif., and the California-Arizona State line, from Los Angeles over California Highway 60 to junction Interstate Highway 10, thence over Interstate Highway 10 to the California-Arizona State line; (12) between Barstow, Calif., and the Nevada-California State line, from Barstow over U.S. Highways 91 and 466; (13) between San Diego, Calif., and the California-Arizona State line over U.S. Highway 80; and (14) between Baker, Calif., and the Nevada-California State line over California Highway 127; and return over the same routes in (1) through (14) above, serving all intermediate points, and serving off-route points within a radius of 50 miles. (B) (1) *Commodities* which, by reason of size or weight, require special handling or the use of special equipment, and *commodities* which do not require special handling or the use of special equipment when moving in the same shipment on the same bill of lading as commodities which, by reason of size or weight, require special handling or the use of special equipment; (2) *self-propelled articles*, transported on trailers, and *related machinery, tools, parts, and supplies* moving in connection therewith; (3) *iron and steel articles* as described in Appendix 5 to the Commission's report in *Descriptions in Motor Carrier Certificates*, ex parte, MC-45, 61 M.C.C. 209 and 766; (4) *pipe* other than iron or steel, together with fittings; and (5) *construction materials*. Irregular routes: Between points in California on the one hand, and, on the other, points in Oregon, Washington, Idaho, Montana, Utah, Nevada, Wyoming, Colorado, and Arizona. NOTE: The instant application seeks to convert the certificate of registration under MC 120728 (Sub-1), into a Certificate of Public Convenience and Necessity. If a hearing is deemed necessary, applicant requests it be held at Los Angeles or San Francisco, Calif., or Portland, Ore.

No. MC 123389 (Sub-No. 13), filed October 26, 1971. Applicant: CROUSE CARTAGE COMPANY, a corporation, Carroll, Iowa, 51401. Applicant's representative: William S. Rosen, 630 Osborn Building, St. Paul, MI 55102. Authority sought to operate as a common carrier, by motor vehicle, over irregular routes, transporting: *Meats, meat products and meat byproducts and articles distributed by meat packinghouses* as described in sections A and C of appendix 1 to the report in *Descriptions in Motor Carrier Certificates*, 61 M.C.C. 209 and 766 (except hides and commodities in bulk), (1) from Denison and Fort Dodge, Iowa; Dakota City and West Point, Nebr., to points in Connecticut, Delaware, Maine, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia, and the District of Columbia, restricted to traffic originating at the plantsites of and storage facilities utilized by Iowa Beef Processors, Inc., and (2) from Denison and Fort Dodge, Iowa and West Point, Nebr., to points in Illinois; points in Kansas in the Kansas City commercial zone and Missouri, restricted to traffic originating at the plantsites of and storage facilities utilized by Iowa Beef Processors, Inc. NOTE: Applicant states that the requested authority can be tacked with its existing authority but indicates that it has no present intention to tack and therefore does not identify the points or territory that can be served through tacking. Person interested in the tacking possibilities are cautioned that failure to oppose the application may result in an unrestricted grant of authority. If a hearing is deemed necessary, applicant requests it be held at Des Moines, Iowa, or Washington, D.C.

No. MC 123405 (Sub-No. 29), filed October 19, 1971. Applicant: FOOD TRANSPORT, INC., Post Office Box 1041, York, PA 17405. Applicant's representative: Christian V. Graf, 407 North Front Street, Harrisburg, PA 17101. Authority sought to operate as a common carrier, by motor vehicle, over irregular routes, transporting: *Foodstuffs, pet foods and pet supplies, drugs, insecticides* (other than agricultural), and *buffing and polishing compounds*, from the plantsite and storage facilities utilized by the R. T. French Co. at or near Rochester, N.Y., to points in Florida. NOTE: Common control may be involved. Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Washington, D.C., or Rochester, N.Y.

No. MC 124692 (Sub-No. 84), filed November 1, 1971. Applicant: SAMMONS TRUCKING, a corporation, Post Office Box 1447, Missoula, MT 59801. Applicant's representative: Donald W. Smith, 900 Circle Tower Building, Indianapolis, Ind. 42604. Authority sought to operate as a common carrier, by motor vehicle, over irregular routes, transporting: *Lumber and lumber products*, from points in Lawrence and Pennington Counties, S. Dak., to points in North Dakota, Minnesota, and Wisconsin.

NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. Common control may be involved. If a hearing is deemed necessary, applicant requests it be held at Rapid City, S. Dak., or Billings, Mont.

No. MC 124796 (Sub-No. 90), filed October 20, 1971. Applicant: CONTINENTAL CONTRACT CARRIER CORP., 15045 East Salt Lake Avenue, Post Office Box 1257, City of Industry, CA 91747. Applicant's representative: J. Max Harding, Post Office Box 82028, Lincoln, NE 68501. Authority sought to operate as a *contract carrier*, by motor vehicle, over irregular routes, transporting: (1) *Salt and salt mixtures, and pepper, condiments, flavoring materials, animal and poultry mineral feed mixtures and materials and supplies*, used in the agricultural, water treatment, food processing, wholesale grocery and institutional supply industries, when shipped in mixed loads with salt and salt mixtures, from Weeks Island, La., to points in Alabama, Georgia, Mississippi, and Tennessee; (2) *Ground clay*, from Weeks Island, La., to points in Alabama, Florida, Georgia, Mississippi, North Carolina, South Carolina, and Tennessee; and (3) *Returned, refused and rejected shipments of the commodities* described in (1) and (2) above, from the destination States shown to Weeks Island, La. Restriction: The operations authorized are restricted against the transportation of commodities in bulk and further restricted to traffic which either originates or terminates at the plantsite of Morton-Norwich Products, Inc., its divisions and affiliates at Weeks Island, La. Said operations are limited to a transportation service to be performed under a continuing contract, or contracts with Norton Norwich Products, Inc., its divisions and affiliates. NOTE: Common control may be involved. If a hearing is deemed necessary, applicant requests it be held at Memphis, Tenn., or Washington, D.C.

No. MC 125168 (Sub-No. 20), filed October 22, 1971. Applicant: OIL TANK LINES, INC., Box 190, Hook Road and Darby Creek, Darby, PA 19023. Applicant's representative: Edwin H. van Deusen, 50 West Broad Street, Columbus, OH 43215. Authority sought to operate as a *contract carrier*, by motor vehicle, over irregular routes, transporting: (1) *Petroleum and petroleum products*, in bulk, in tank vehicles, from points in Congo (Hancock County), W. Va., to points in Connecticut, the District of Columbia, Delaware, Maryland, Massachusetts, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Rhode Island, South Carolina, Vermont, and Virginia; and (2) *petroleum oils and petroleum oil additives*, in bulk, in tank vehicles, from Bayonne, Elizabeth, Paulsboro, Petty's Island, Sewaren, N.J.; Bradford, Emlenton, Farmer's Valley, Freedom, Karns City, Philadelphia, Pittsburgh, Reno, and Rouseville, Pa.; to Congo (Hancock County), W. Va., under a continuing contract with Quaker State Oil Refining

Corp. NOTE: If a hearing is deemed necessary, applicant requests it be held at Washington, D.C.

No. MC 125420 (Sub-No. 20), filed October 22, 1971. Applicant: MERCURY TANKLINES LIMITED, a corporation, 4056 Ogden Road SE., Calgary, AB, Canada. Applicant's representative: Ray F. Koby, 314 Montana Building, Great Falls, Mont. 59401. Authority sought to operate as a *contract carrier*, by motor vehicle, over irregular routes, transporting: *Alcoholic beverages*, in bulk, in tank vehicles, between Louisville and Bardstons, Ky., on the one hand, and, on the other, ports of entry on the United States-Canada international boundary at or near Detroit and Port Huron, Mich., under contract with Brown Forman Distillers Corp. and Canadian Mist Distillers, Ltd. NOTE: Common control and dual operations may be involved. If a hearing is deemed necessary, applicant requests it be held at Kentucky, Michigan, or Montana.

No. MC 125474 (Sub-No. 31), filed October 21, 1971. Applicant: BULK HAULERS, INC., Post Office Box 3601, Wilmington, NC 28401. Applicant's representative: John C. Bradley, 618 Perpetual Building, Washington, D.C. 20004. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Citric acid, sodium citrate, acid gluconic, chelating compounds, sulphuric acid, caustic soda, and chemicals*, between points in Brunswick County, N.C., on the one hand, and, on the other, points in North Carolina, South Carolina, Georgia, West Virginia, Virginia, Florida, Tennessee, Maryland, and the District of Columbia. NOTE: Applicant states that the requested authority can be tacked with its existing authority but indicates that it has no present intention to tack and therefore does not identify the points or territories which can be served through tacking. Persons interested in the tacking possibilities are cautioned that failure to oppose the application may result in an unrestricted grant of authority. If a hearing is deemed necessary, applicant requests it be held at Washington, D.C., or Raleigh, N.C.

No. MC 126142 (Sub-No. 6) (amendment), filed August 9, 1971, published in the FEDERAL REGISTER issue of October 7, 1971, amended and republished as amended, this issue. Applicant: GLEASON TRANSPORTATION CO., INC., Post Office Box 907, White River Junction, VT 05001. Applicant's representative: Frederick T. O'Sullivan, 372 Granite Avenue, Milton, MA 02186. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Meat, meat products and meat byproducts* (except commodities in bulk, in tank vehicles, hides and skin), between Springfield, Vt., and Claremont, N.H. NOTE: Applicant states it will tack this authority to its Sub 1, at Springfield, Vt., to perform a single line service on traffic originating under MC 126142 Sub 5. The purpose of this republication is to reflect a "between movement" of the proposed authority, in

lieu of "from". If a hearing is deemed necessary, applicant requests it be held at Boston, Mass., or Montpelier, Vt.

No. MC 126276 (Sub-No. 58), filed October 15, 1971. Applicant: FAST MOTOR SERVICE, INC., 12855 Ponderosa Drive, Palos Heights, IL 60463. Applicant's representative: Albert A. Andrin, 29 South La Salle Street, Chicago, IL 60603. Authority sought to operate as a *contract carrier*, by motor vehicle, over irregular routes, transporting: *Containers, container ends, and closures*, from the plantsites of Crown Cork & Seal Co., at Fruitland and Baltimore, Md.; Philadelphia, Pa.; North Bergen, N.J.; Winchester, Va.; and Spartanburg, S.C., to points in Maryland, South Carolina, North Carolina, Georgia, Alabama, Tennessee, Florida, Louisiana, Texas, West Virginia, Virginia, and Arkansas, under contract with Crown Cork & Seal Co., Inc. NOTE: If a hearing is deemed necessary, applicant requests it be held at Chicago, Ill.

No. MC 126278 (Sub-No. 4), filed October 18, 1971. Applicant: FRIGID WAY CARTAGE CO., a corporation, 4500 West 44th Place, Chicago, IL 60632. Applicant's representative: William J. Boyd, 29 South La Salle Street, Chicago, IL 60603. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Frozen foods*, from Chicago and Deerfield, Ill., to points in Indiana, Michigan, Ohio, and Louisville, Ky., restricted to the transportation of traffic originating at the facilities of Continental Freezers of Illinois at Chicago, Ill., and the plantsites and warehouses utilized by Kitchens of Sara Lee, Inc., at Deerfield and Chicago, Ill., and destined to the above-named destination States. NOTE: If a hearing is deemed necessary, applicant requests it be held at Chicago, Ill.

No. MC 126389 (Sub-No. 1), filed October 26, 1971. Applicant: MARY KIRKPATRICK, doing business as KIRKPATRICK TRUCKING, 11317 Route 14, North, Harvard, IL 60033. Applicant's representative: Charles B. Myers, 611 La Salle Bank Building, Chicago, Ill. 60603. Authority sought to operate as a *contract carrier*, by motor vehicle, over irregular routes, transporting: (1) *Mineral wool and mineral wool products and materials and supplies* (except liquid commodities in bulk), used in the manufacture, installation, or distribution thereof; (a) between the plantsite and warehouse facilities of the United States Gypsum Co. in Walworth County, Wis., on the one hand, and, on the other hand, points in Arkansas, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Pennsylvania, South Dakota, Tennessee, and Wisconsin; (b) between the plantsite and warehouse facilities of the United States Gypsum Co. located in Wabash County, Ind., on the one hand, and, on the other hand, points in Iowa, Minnesota, North Dakota, South Dakota, Wisconsin, and points in Illinois, on and north of Illinois Highway 17 (except points in Cook, Du Page, and Will Counties, Ill.); and (2) *products*

treated or impregnated with plastics, plastic articles and materials or supplies (except liquid commodities in bulk), used in the manufacture or distribution thereof, between the plantsite and warehouse facilities of the United States Gypsum Co. located in Dodge, Jefferson, and Waukesha Counties, Wis., on the one hand, and, on the other, points in Arkansas, Illinois, Indiana, Iowa, Kansas, Kentucky, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, Pennsylvania, South Dakota, Tennessee, and Wisconsin, under contract with United States-Gypsum Co. NOTE: Applicant holds common carrier authority under MC 106594, therefore, dual operations may be involved. If a hearing is deemed necessary, applicant requests it be held at Chicago, Ill.

No. MC 126587 (Sub-No. 1), filed October 26, 1971. Applicant: PARK AVENUE STORAGE CORPORATION, 359-365 Park Avenue, Newark, NJ 07102. Applicant's representative: Edward F. Bowes, 744 Broad Street, Newark, NJ 07102. Authority sought to operate as a common carrier, by motor vehicle, over irregular routes, transporting: Used household goods and personal effects, in containers limited to shipments transported in containers, moving on the through bill of lading of a forwarder operating under the section 402(b)(2) exemption of the Freight Forwarder Act of Part 4 of the Interstate Commerce Act, and having an immediately prior or subsequent line-haul movement by rail, motor, water, or air, between points in Hudson and Essex Counties, N.J., within the exempt commercial zone of New York, N.Y., as defined by the Interstate Commerce Commission including Kearny, Newark, Elizabeth, and Port Reading, N.J., on the one hand, and, on the other, points in Bergen, Essex, Somerset, Mercer, Monmouth, Camden, and Gloucester Counties, N.J. NOTE: Applicant is presently authorized to transport household goods from the above-mentioned counties in New Jersey (except Sussex County), to points in New York, Pennsylvania, and Delaware. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Newark, N.J., or New York, N.Y.

No. MC 126899 (Sub-No. 49), filed September 22, 1971. Applicant: USHER TRANSPORT, INC., 3925 Old Benton Road, Paducah, KY 42001. Applicant's representative: George M. Catlett, 703-706 McClure Building, Frankfort, Ky. 40601. Authority sought to operate as a common carrier, by motor vehicle, over irregular routes, transporting: (1) Petroleum and petroleum products, in bulk, in tank vehicles, from points in McCracken and Livingston Counties, Ky., and points in Massac County, Ill., to points in Benton, Crockett, Dyer, Henry, Humphreys, Montgomery, Stewart, Carroll, Dickson, Gibson, Houston, Lake, Obion, and Weakley Counties, Tenn.; and (2) jet fuel and aviation gasoline from Memphis, Tenn., to Paducah, Ky. NOTE:

Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Cincinnati, Ohio, or Louisville, Ky.

No. MC 127227 (Sub-No. 8), filed October 28, 1971. Applicant: BIRDSALL, INC., 821 Avenue E, Riviera Beach, FL 33404. Applicant's representative: J. Edward Allen, Post Office Box 1086, Jacksonville, FL 32201. Authority sought to operate as a common carrier, by motor vehicle, over irregular routes, transporting: General commodities, between points in Dade, Broward, Martin, and Palm Beach Counties, Fla., restricted to traffic having had an immediate prior or subsequent movement by water in foreign commerce. NOTE: Applicant states that it presently holds authority between the points in Florida, restricted to traffic having an immediate prior or subsequent movement by water, and further restricted to particular islands in the Caribbean to which shipments originate or destined, under MC 127227 and Subs 1 through 6 thereunder, and that the purpose of this application is to remove the restriction as to particular islands and ports, stating also that it does not seek any duplicating authority, and consents to the cancellation of any duplicating authority upon the granting of the instant application. Applicant further states that the requested authority cannot be tacked to its existing authority. If a hearing is deemed necessary, applicant requests it be held at Miami or West Palm Beach, Fla.

No. MC 127274 (Sub-No. 34), filed November 1, 1971. Applicant: SHERWOOD TRUCKING, INC., 1517 Hoyt Avenue, Muncie, IN 47302. Applicant's representative: Donald W. Smith, 900 Circle Tower, Indianapolis, Ind. 46204. Authority sought to operate as a common carrier, by motor vehicle, over irregular routes, transporting: Foodstuffs, from the plantsite of American Home Foods at La Porte, Ind., to points in Arkansas, Texas, and Missouri, on and south of Interstate 44 and Joplin, Mo. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Indianapolis, Ind.

No. MC 127505 (Sub-No. 48), filed October 25, 1971. Applicant: RALPH H. BOELK, doing business as R. H. BOELK TRUCK LINE, Route No. 2, Mendota, IL 61342. Applicant's representative: Walter J. Kobos, 1016 Kehoe Drive, St. Charles, IL 60174. Authority sought to operate as a common carrier, by motor vehicle, over irregular routes, transporting: Urethane and urethane products, urethane roofing and insulation, and materials used in the installation thereof, from the plantsite of the Phillip Carey Co., Division of Panaco Corp., Elizabethtown, Ky., to points in Illinois, Iowa, Indiana, Michigan, Minnesota, North Dakota, South Dakota, and Wisconsin. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it

be held at Cincinnati, Ohio or Washington, D.C.

No. MC 128030 (Sub-No. 32) (Correction), filed October 8, 1971. published FEDERAL REGISTER of November 18, 1971, corrected in part and republished as corrected this issue. Applicant: THE STOUT TRUCKING CO., INC., Post Office Box 177, Rural Route No. 1, Urbana, IL 61801. Applicant's representative: James P. Flanagan, 111 West Washington Street, Chicago, IL 60602. NOTE: The purpose of this partial republication is to reflect the correct docket number assigned as MC 128030 Sub-No. 32, in lieu of MC 128020 Sub-No. 32, erroneously shown in previous publication. The rest of the application remains the same.

No. MC 128215 (Sub-No. 9), filed October 18, 1971. Applicant: MARTIN TRAILER TOTERS, INC., 4038 Jefferson Highway, New Orleans, LA 70121. Applicant's representative: Donald B. Morrison, 717 Deposit Guaranty National Bank Building, Post Office Box 22628, Jackson, MS 39205. Authority sought to operate as a common carrier, by motor vehicle, over irregular routes, transporting: Trailers, designed to be drawn by passenger automobiles, in initial movements, and buildings, in sections, in initial movements; (1) from the plantsite of Guerdon Industries, Inc., at or near Greenwood, Miss., to points in Louisiana, Arkansas, Alabama, Tennessee, and Missouri; (2) from the plantsite of Yazoo Mobile Homes, Inc., at or near Yazoo, Miss., to points in Alabama, Florida, Louisiana, Texas, Arkansas, Missouri, Tennessee, and West Virginia; and (3) from points in Warren County, Miss., to points in Louisiana, Mississippi, Texas, Arkansas, Tennessee, and Alabama. NOTE: If a hearing is deemed necessary, applicant requests it be held at Jackson, Miss.

No. MC 128375 (Sub-No. 72), filed October 25, 1971. Applicant: CRETE CARRIER CORPORATION, Box 245, Crete, NE 68333. Applicant's representative: Duane Acklie, Post Office Box 80806, Lincoln, NE 68501. Authority sought to operate as a contract carrier, by motor vehicle, over irregular routes, transporting: Paper and paper products, from Erie and Lockhaven, Pa., Watervliet, Mich., Oswego, N.Y., Westfield, West Springfield, Woronoco, and Turners Falls, Mass., to points in Arizona, Idaho, New Mexico, California, Oregon, and Washington, under continuing contract with Hammermill Paper Co., its subsidiaries and divisions. NOTE: If a hearing is deemed necessary, applicant requests it be held at Lincoln, Nebr.

No. MC 128375 (Sub-No. 73), filed November 1, 1971. Applicant: CRETE CARRIER CORPORATION, Box 249, Crete, NE 68333. Applicant's representative: Duane W. Acklie, Box 80806, Lincoln, NE 68501. Authority sought to operate as a contract carrier, by motor vehicle, over irregular routes, transporting: Paper and paper products, from Erie and Lock Haven, Pa.; Watervliet, Mich.; Hamilton, Ohio; Oswego, N.Y.; Woronoco, Turners Falls, Westfield, and West

Springfield, Mass., to points in Tennessee, Alabama, Georgia, Florida, North Carolina, South Carolina, Mississippi, and Louisiana, under continuing contract with Hammerrill Paper Co. and its subsidiaries and divisions. **NOTE:** If a hearing is deemed necessary, applicant requests it be held at Lincoln, Nebr.

No. MC 128672 (Sub-No. 3), filed October 22, 1971. Applicant: **TIMBER TRUCKING CO., INC.**, Post Office Box 8188, 928 Cross Lanes Drive, Nitro, WV 25143. Applicant's representative: Robert L. DeHart (same address as above). Authority sought to operate as a *contract carrier*, by motor vehicle, over irregular routes, transporting: *Lumber, timber and wood products*, from points in Powell County, Ky., to points in Delaware, Indiana, Kentucky, Maryland, Michigan, New Jersey, New York, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, and West Virginia, under contract with the Burke-Parsons-Bowby Corp. **NOTE:** If a hearing is deemed necessary, applicant requests it be held at Charleston, W. Va., or Washington, D.C.

No. MC 128720 (Sub-No. 2), filed October 18, 1971. Applicant: **MERCHANTS FREIGHT LINE, INC.**, Omohundro Drive, Nashville, Tenn. 37210. Applicant's representative: Walter Harwood, 1822 Parkway Towers, Nashville, TN 37219. Authority sought to operate as a *common carrier*, by motor vehicle, over regular routes, transporting: *General commodities* (except those of unusual value, classes A and B explosives, household goods, commodities in bulk, and those requiring special equipment): (1) Between Fountain Run, Ky., and Lafayette, Tenn., from Fountain Run, Ky., over Kentucky Highway 100 to Holland, thence over Kentucky Highway 99 to the Kentucky-Tennessee State line, thence over Tennessee Highway 10 to Lafayette, Tenn., and return over the same route, serving all intermediate points; (2) between Holland and Tompkinsville, Ky., from Holland, Ky., over Kentucky Highway 100 to its junction with Kentucky Highway 1366, thence over Kentucky Highway 1366 to its junction with Kentucky Highway 63 near Tompkinsville, thence over Kentucky Highway 63 to Tompkinsville, and return over the same route, serving the intermediate point of Fountain Run, Ky., and serving Tompkinsville, and also the junction of Kentucky Highways 100 and 63 (about 2 miles north of the Kentucky-Tennessee State line) for joinder only; and (3) between Gallatin, Tenn., and Fountain Run, Ky., from Gallatin over U.S. Highway 31-E to Scottsville, Ky., thence over Kentucky Highway 100 to Fountain Run, Ky., and return over the same route, serving no intermediate points, and serving Gallatin for joinder only. **NOTE:** Common control may be involved. If a hearing is deemed necessary, applicant requests it be held at Nashville, Tenn., or Louisville, Ky.

No. MC 128860 (Sub-No. 10), filed October 20, 1971. Applicant: **LARRY'S EXPRESS, INC.**, 720 Lake Street, Tomah,

WI 54660. Applicant's representative: Edward Solie, Executive Building, Suite 100, 4513 Vernon Boulevard, Madison, WI 53705. Authority sought to operate as a *contract carrier*, by motor vehicle, over irregular routes, transporting: *Malt beverages and advertising materials, premiums, and malt beverages dispensing equipment*, when moving at the same time and in the same vehicle with malt beverages, from New York, N.Y., and Newark, N.J., to points in Kansas, under a continuing contract, or contracts with Van Munching & Co., Inc., New York, N.Y. **NOTE:** If a hearing is deemed necessary, applicant requests it be held at Madison, Wis.

No. MC 129475 (Sub-No. 9), filed October 18, 1971. Applicant: **CARRELL TRUCKING CO., INC.**, Post Office Box 186, Monroe, GA 30655. Applicant's representative: William Addams, Suite 527, 1776 Peachtree Street NW., Atlanta, GA 30309. Authority sought to operate as a *contract carrier*, by motor vehicle, over irregular routes, transporting: *Such merchandise as is dealt in by chain department stores*, between the warehouses of Sears, Roebuck & Co., at Atlanta, Ga., on the one hand, and, on the other, Ridgeland, S.C., under contract with Sears, Roebuck & Co. **NOTE:** If a hearing is deemed necessary, applicant requests it be held at Atlanta, Ga.

No. MC 133037 (Sub-No. 3), filed November 1, 1971. Applicant: **MILE-HI EXPRESS, INC.**, 1335 East 40th Street, Denver, CO 80205. Applicant's representative: Duane W. Acklie, Post Office Box 80806, 521 South 14th Street, Lincoln, NE 68501. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Meats, packinghouse products and commodities used by packinghouses*, between Denver, Colo., on the one hand, and, on the other, points in Laramie County, Wyo. **NOTE:** Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Denver, Colo.

No. MC 133065 (Sub-No. 17), filed October 22, 1971. Applicant: **ECKLEY TRUCKING AND LEASING, INC.**, Post Office Box 156, Mead, NE 68041. Applicant's representative: Gailyn L. Larsen, 521 South 14th Street, Post Office Box 80806, Lincoln, NE 68501. Authority sought to operate as a *contract carrier*, by motor vehicle, over irregular routes, transporting: *Salvage rail track, salvage switches, salvage plates, salvage ties, salvage spikes, and related salvage materials*, between points in Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Oregon, Washington, and Wyoming, under continuing contract with A & K Railroad Materials, Inc. **NOTE:** If a hearing is deemed necessary, applicant requests it be held at Lincoln or Omaha, Nebr.

No. MC 133574 (Sub-No. 15), filed October 18, 1971. Applicant: **TERRILL TRUCKING COMPANY**, a corporation, 1016 Geneseo Street, Post Office Box 940, Storm Lake, Iowa 50588. Applicant's rep-

resentative: Daryl Terrill (same address as applicant). Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Meat, meat products, meat byproducts and articles distributed by meat packing-houses*, as described in sections A and C of Appendix 1 to the report in *Descriptions in Motor Carrier Certificates*, 61 M.C.C. 209 and 766 (except hides and commodities in bulk), from Council Bluffs, Iowa, to points in Georgia, Alabama, Florida, and Tennessee. **NOTE:** Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Omaha, Nebr., or Des Moines, Iowa.

No. MC 134321 (Sub-No. 3), filed October 15, 1971. Applicant: **HAROLD W. HOLT**, Route 5, Manchester, Tenn. 37355. Applicant's representative: A. O. Buck, 500 Court Square Building, Nashville, Tenn. 37201. Authority sought to operate as a *contract carrier*, by motor vehicle, over irregular routes, transporting: *Metal roofing, fencing, equipment and nails*, from Fairfield, Ala., to Manchester, Tenn., under contract with Powers Farm Store, Manchester, Tenn. **NOTE:** If a hearing is deemed necessary, applicant requests it be held at Nashville, Tenn.

No. MC 134323 (Sub-No. 20), filed November 1, 1971. Applicant: **JAY LINES, INC.**, 720 North Grand Street, Amarillo, TX 79105. Applicant's representative: Duane Acklie, 521 South 14th Street, Post Office Box 80806, Lincoln, NE 68501. Authority sought to operate as a *contract carrier*, by motor vehicle, over irregular routes, transporting: *Such commodities as are dealt in by hardware stores, drug stores, supermarkets, discount stores, and department stores*, from the warehouses and facilities of Action Industries and its wholly owned subsidiaries located in Allegheny County, Pa., to points in Texas, Arkansas, Missouri, Louisiana, Kansas, Oklahoma, New Mexico, and Colorado, under contract with Action Industries, Inc., Cheswick, Pa. **NOTE:** Common control may be involved. If a hearing is deemed necessary, applicant requests it be held at Pittsburgh, Pa., or Washington, D.C.

No. MC 134347 (Sub-No. 2), filed October 18, 1971. Applicant: **SAMUEL M. COKER**, doing business as COKER TRUCK LINE, 305 Blue Hills Drive, Nashville, TN 37214. Applicant's representative: Samuel M. Coker (same address as applicant). Authority sought to operate as a *contract carrier*, by motor vehicle, over irregular routes, transporting: *Automobile parts and automobile accessories*, between Nashville, Tenn., on the one hand, and, on the other, points in Butler, Caldwell, Daviess, Hancock, Henderson, Hopkins, McLean, Muhlenberg, Ohio, and Webster Counties, Ky., under contract with Mid-State Automotive Distributors, Inc. **NOTE:** If a hearing is deemed necessary, applicant requests it be held at Nashville, Tenn.

No. MC 135032 (Sub-No. 2), filed October 15, 1971. Applicant: **HIAWATHA PRODUCE COMPANY**, a corporation,

3850 Fourth Street, Winona, MN 55987. Applicant's representative, Allan B. Torhorst, Post Office Box 307, Burlington, WI 53105. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Dairy products, and other commodities distributed by dairies* (except in bulk), from the plantsites, warehouses, storage and production facilities utilized by Land O'Lakes, Inc., in Minnesota, Wisconsin, and Chicago, Ill., to points in Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, West Virginia, and the District of Columbia. **NOTE:** Applicant states that the requested authority cannot be tacked with its existing authority. Applicant now holds contract carrier authority under its No. MC 133709 Sub-No. 1, therefore dual operations may be involved. If a hearing is deemed necessary, applicant requests it be held at Minneapolis, Minn.

No. MC 135033 (Sub-No. 4), filed October 18, 1971. Applicant: SILVEY & COMPANY, a corporation, Gifford Road, Council Bluffs, Iowa 51501. Applicant's representative: Donald L. Stern, 530 Univac Building, Omaha, Nebr. 68106. Authority sought to operate as a *contract carrier*, by motor vehicle, over irregular routes, transporting: *Plastic housewares*, from Fitchburg, Mass., to points in Minnesota, Wisconsin, Iowa, Nebraska, Kansas, Missouri, and Illinois, under contract with Gotham Industries. **NOTE:** If a hearing is deemed necessary, applicant requests it be held at New York, N.Y.

No. MC 135049 (Sub-No. 3), filed September 24, 1971. Applicant: KEARNEY'S INC., U.S. Alternate Route 611, Portland, Pa. 18331. Applicant's representative: Kenneth R. Davis, 999 Union Street, Taylor, PA 18517. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Expanded crushed slate in dump-type semitrailers and crushed slate powder*, from Bangor, Pa., to New York, N.Y., points in Nassau, Suffolk, and Westchester Counties, N.Y., and points in New Jersey. **NOTE:** Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Allentown, or Philadelphia, Pa.

No. MC 135071 (Sub-No. 3), filed October 14, 1971. Applicant: RONALD M. STROLE AND BETTY L. STROLE, a partnership, doing business as AA-1 MOVING & STORAGE, 18485 Iona Avenue, Post Office Box 189, Lemoore, CA 93245. Applicant's representative: Warren N. Grossman, 606 South Olive Street, Los Angeles, CA 90014. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Household goods*, as defined by the Commission, between points in Kings, Tulare, Fresno, Madera, and Kern Counties, Calif., restricted to the transportation of traffic having a prior or subsequent movement, in containers, beyond the points authorized and further

restricted to the performance of pickup and delivery service in connection with packing, crating, containerization, or unpacking, uncrating, and decontainerization of such traffic. **NOTE:** Common control may be involved. Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Los Angeles, Calif.

No. MC 135152 (Sub-No. 4), filed November 1, 1971. Applicant: CASKET DISTRIBUTORS, INC., Rural Route No. 2, Harrison, Ohio 45030. Applicant's representative: Jack B. Josselson, 700 Atlas Bank Building, Cincinnati, Ohio 45202. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Uncrated caskets, casket displays, funeral supplies, and crated caskets*, in mixed loads with uncrated caskets, from Eynon, Pa.; Burlington, N.C.; Syracuse, N.Y.; and Jackson, Miss., to points in the United States (except Alaska and Hawaii). **NOTE:** Common control and dual operations may be involved. Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Washington, D.C.

No. MC 135153 (Sub-No. 12), filed October 28, 1971. Applicant: GREAT OVERLAND, INC., 1730 Shaber Street, Sparks, NV 89431. Applicant's representative: Harley E. Laughlin, Post Office Box 515, Sparks, NV 89431. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Meats, meat products, meat byproducts and articles distributed by meat packinghouses*, as defined by the Commission, between Dodge City, Kans., on the one hand, and points in Kansas, Louisiana, Texas, Arizona, New Mexico, California, Nevada, Oregon, Washington, and Utah, on the other hand. **NOTE:** Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Carson City, Nev.

No. MC 135272 (Sub-No. 1), filed October 21, 1971. Applicant: ROBERT CRAWFORD, doing business as CRAWFORD TRUCKING COMPANY, Post Office Box 7172, Omaha, NE 68107. Applicant's representative: Donald L. Stern, 530 Univac Building, Omaha, Nebr. 68106. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Motorcycles and motorcycle trailers, motorcycle parts and accessories, and motorcycles's accessories*, from points in California, to Fremont, Omaha, and Bellevue, Nebr., and Council Bluffs, Iowa. **NOTE:** Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Omaha, Nebr.

No. MC 135326 (Sub-No. 3), filed October 18, 1971. Applicant: BILLY R. ALMAND, doing business as ALMAND TRUCKING COMPANY, Post Office Box 79, Keithville, LA 71047. Applicant's rep-

resentative: B. R. Almand (same address as applicant). Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Roofing granules*, dry, in bulk, from points in Pulaski County, Ark., to Shreveport, La. **NOTE:** If a hearing is deemed necessary, applicant requests it be held at Shreveport or Baton Rouge, La., or Little Rock, Ark.

No. MC 135654 (Sub-No. 2), filed August 19, 1971. Applicant: WILLIAM A. MAXSON, doing business as DELL MAXSON MILK TRANSPORT, Pittsford, Mich. 49271. Applicant's representative: L. Russell Heuman, 410 South Jackson Street, Jackson, MI 49201. Authority sought to operate as a *contract carrier*, by motor vehicle, over irregular routes, transporting: *Plastic articles*, between Jonesville, Mich., and Winston-Salem, N.C., Linden, N.J., and Marion, S.C. under contract with Mark I Molded Plastics. **NOTE:** Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Jackson or Lansing, Mich.

No. MC 135736 (Sub-No. 1), filed August 6, 1971. Applicant: FLEET SERVICES, INC., Rockefeller Center, Time & Life Building, New York, N.Y. 10020. Applicant's representative: Charles W. Chapman, 233 Broadway, New York, NY 10007. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *General commodities in express service* (except in bulk, in tank vehicles), from New York, N.Y., to (1) points in Connecticut and New Jersey; (2) points in Berkshire, Franklin, Hampshire, and Hampden Counties, Mass.; (3) points in Pennsylvania east of a line beginning at the Pennsylvania-Maryland State line and extending along Interstate Highway 83 to Harrisburg, thence along Pennsylvania Highway 147 to Muncy, thence along Pennsylvania Highway 405 to Hughesville, thence along U.S. Highway 220 to the Pennsylvania-New York State line; and (4) to the District of Columbia. **NOTE:** If a hearing is deemed necessary, applicant requests it be held at New York, N.Y. or Washington, D.C.

No. MC 135866 (Sub-No. 1) (Clarification), filed August 25, 1971, published in the FEDERAL REGISTER issue of October 15, 1971, and republished, in part, as clarified, this issue. Applicant: JACK L. MASSENDER, doing business as ZILLAH HAULING SERVICE, 6502 North Pittsburg, Spokane, WA 99207. The purpose of this partial republication is to delete the name of John Hall as applicant's representative, which was erroneously submitted by applicant in previous publication. The rest of the application remains as previously published.

No. MC 135876 (Sub-No. 1) (Correction), filed August 12, 1971, published in the FEDERAL REGISTER issue of September 16, 1971, and republished in part, as corrected, this issue. Applicant: JESSE GOMEZ, Route 1, Box 114, Wellton, AZ 85356. Applicant's representative: A. Michael Bernstein, 1327 United Bank

Building, Phoenix, Ariz. 85012. The purpose of this partial republication is to show the correct docket number as MC 135876 (Sub-No. 1), in lieu of MC 135876, which was inadvertently omitted in the previous publication. The rest of the application remains as published.

No. MC 135878 (Sub-No. 2), filed October 20, 1971. Applicant: AVERIL W. HUNTER, Rural Route No. 3, Florenceville, New Brunswick, Canada. Applicant's representative: William D. Pinansky, 443 Congress Street, Portland, ME 04111. Authority sought to operate as a common carrier, by motor vehicle, over irregular routes, transporting: *Wood chips*, from port of entry on the international boundary line between the United States and Canada at or near Houlton, Maine, to points in Maine. Note: If a hearing is deemed necessary, applicant requests it be held at Portland, Maine.

No. MC 136067, filed September 20, 1971. Applicant: PHILIPPE RICHARD, LTD., St-Pascal, County of Kamouraska, Province of Quebec. Applicant's representative: Aurele Richard, 1619, Boulevard de l'Entente, Quebec, Province de Quebec. Authority sought to operate as a common carrier, by motor vehicle, over regular routes, transporting: *Soya feed for animals*, from the port of entry on the international boundary line between Canada and the United States at or near Rouses Point, N.Y., to the city of Rouses Point and return to this port of entry. Note: If a hearing is deemed necessary, applicant requests it be held at Concord, N.H.

No. MC 136085 (Sub-No. 1), filed October 15, 1971. Applicant: B & M CARRIERS LIMITED, Post Office Box 4040, Station E, Ottawa 1, ON, Canada. Applicant's representative: Herbert M. Canter, 345 South Warren Street, Syracuse, NY 13202. Authority sought to operate as a common carrier, by motor vehicle, over irregular routes, transporting: *Salt*, in bulk, in dump vehicles, from ports of entry on the United States-Canada border at or near Rooseveltown, Ogdensburg, and Alexandria Bay, N.Y., to points in Clinton, Franklin, Hamilton, Herkimer, Jefferson, Lewis, and St. Lawrence Counties, N.Y. Note: Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at Syracuse, N.Y., or Washington, D.C.

No. MC 136106, filed October 12, 1971. Applicant: RICLO TRUCKING CO., a corporation, 840 Bloomfield Avenue, Clifton, NJ 07012. Applicant's representative: George A. Olsen, 69 Tonnele Avenue, Jersey City, NJ 07306. Authority sought to operate as a contract carrier, by motor vehicle, over irregular routes, transporting: *General commodities* (except those of unusual value, dangerous explosives, household goods as defined in Practices of Motor Carriers of Household Goods, commodities in bulk, and those requiring special equipment), from the site of Allwood Warehouse Co., Inc., at Clifton, N.J., to points on and within

an area bounded on the south by a line beginning at Ocean City, Md., and extending along U.S. Highway 50 to Washington, D.C.; on the west, by a line beginning at Washington, D.C., and extending along U.S. Highway 70S to Frederick, Md., thence along U.S. Highway 70 to Bedford, Pa., thence along U.S. Highway 220 to Williamsport, Pa., thence along U.S. Highway 15 to junction New York Highway 14, thence along New York Highway 14 to Elmira, N.Y., thence along New York Highway 13 to Cortland, N.Y., thence along Interstate Highway 81 to Syracuse, N.Y.; on the north, by a line beginning at Syracuse, N.Y., and extending along Interstate Highway 90 to Utica, N.Y., thence along New York Highway 8 to Ticonderoga, N.Y., thence along New York Highway 22 to junction U.S. Highway 4 to Portsmouth, N.H.; on the east, by the Atlantic Ocean, from Portsmouth, N.H., to the point of beginning at Ocean City, Md.; under contract with Allwood Warehouse Co., Inc. Note: If a hearing is deemed necessary, applicant requests it be held at Washington, D.C., or New York, N.Y.

No. MC 136103 (Sub-No. 1), filed October 20, 1971. Applicant: JOHN J. SAMMON, 45-64 157th Street, Flushing, NY 11355. Applicant's representative: Arthur J. Piken, 1 Lefrak City Plaza, Flushing, N.Y. 11368. Authority sought to operate as a contract carrier, by motor vehicle, over irregular routes, transporting: *Electro plating, materials and supplies*, except in bulk, in tank vehicles, from Nutley, N.J., to points in that part of the New York, N.Y., commercial zone as defined in the fifth supplemental report in *Commercial Zones and Terminal Areas*, 53 M.C.C. 451, within which operations may be conducted pursuant to the partial exemption in section 203(b)(8) of the Interstate Commerce Act (the "exempt" zone), under contract with Udylyte Corp. Note: If a hearing is deemed necessary, applicant requests it be held at New York, N.Y.

No. MC 136110, filed October 18, 1971. Applicant: GARY PECK, doing business as PECK TRUCKING, Route 1, McArthur, Ohio 45651. Applicant's representative: A. Charles Tell, 100 East Broad Street, Columbus, OH 43215. Authority sought to operate as a contract carrier, by motor vehicle, over irregular routes, transporting: (1) *Sand, gravel, water well packing, and water filter replacements*, from points in Jefferson Township, Ross County, Ohio, to points in the United States (except Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming); and (2) *materials and supplies used in processing, packaging, and shipping the commodities named in (1) above*, on return, under contract with The Parry Co. Note: If a hearing is deemed necessary, applicant requests it be held at Columbus, Ohio.

No. MC 136112, filed October 6, 1971. Applicant: JOSEPH W. NOTO AND ANTHONY J. NOTO, a partnership, do-

ing business as FRANKLIN STREET TRUCKING CO., 41 Worth Street, New York, NY 10013. Applicant's representative: William D. Traub, 10 East 40th Street, New York, NY 10016. Authority sought to operate as a contract carrier, by motor vehicle, over irregular routes, transporting: *Piece goods*, between the warehouse site of A. E. Nathan Co., Inc., at Oceanside, N.Y., and points in the New York, N.Y., commercial zone as defined by the Commission, under contract with A. E. Nathan Co., Inc., Oceanside, N.Y. Note: If a hearing is deemed necessary, applicant requests it be held at New York, N.Y.

No. MC 136113, filed October 4, 1971. Applicant: ADELPHI SALES CO., INC., 31 Grand Street, Brooklyn, NY 11211. Applicant's representative: Jason Horn, 31 Grand Street, Brooklyn, NY 11211. Authority sought to operate as a contract carrier, by motor vehicle, over irregular routes, transporting: *Candies and cookies*, from New York, N.Y., to points in Bergen, Hudson, Essex, Morris, Passaic, Union, and Middlesex Counties, N.J.; and *rejected and return shipments*, on return. Note: If a hearing is deemed necessary, applicant requests it be held at New York, N.Y.

No. MC 136118 (Sub-No. 1), filed October 26, 1971. Applicant: CERNI TRANSPORTATION CORP., 169 Avenue F, Bayonne, NJ 07002. Applicant's representative: Paul J. Keeler, Post Office Box 253, South Plainfield, NJ 07080. Authority sought to operate as a contract carrier, by motor vehicle, over irregular routes, transporting: *Forms or molds, concrete construction, and materials and equipment used in the installation and removal of same, plywood, and steel scaffolding*, (1) between the plantsites and warehouses of Symons Manufacturing Co., a division of Symons Corp., at Des Plaines, Ill., Victor, N.Y., King of Prussia, Pa., Fairfield, N.J., and Baltimore, Md., and (2) between the warehouse of Symons Manufacturing Co., a division of Symons Corp., at Fairfield, N.J., on the one hand, and, on the other, New York, N.Y., and points in Nassau, Suffolk, Westchester, Putnam, Dutchess, Columbia, Greene, Ulster, Sullivan, Orange, and Rockland Counties, N.Y., under contract with Symons Manufacturing Co., a division of Symons Corp. Note: If a hearing is deemed necessary, applicant requests it be held at Newark, N.J., or New York, N.Y.

No. MC 136125, filed October 25, 1971. Applicant: SOUTHEAST TRUCKING, INC., 5425 South Orange Blossom Trail, Orlando, FL 32809. Applicant's representative: Richard J. Brooks, Post Office Box 1531, Tallahassee, FL 32302. Authority sought to operate as a contract carrier, by motor vehicle, over irregular routes, transporting: *Carpet, rugs and rug samples, tile and adhesive, vinyl and adhesive, laminated plastic, contact cement and carpet padding*, from Cartersville and Dalton, Ga., Kearny and Trenton, N.J., Marcus Hook, Pa., Wilburton, Okla., Los Angeles, Calif., Odenton, Md., Grove City, Ohio, Buffalo, N.Y., and Morris, Ill., to warehouses of Atlantic

Distributors, Inc., located at Orlando, Miami, Fort Lauderdale, Tampa, Jacksonville, and Panama City, Fla., and Savannah, Ga., under contract with Atlantic Distributors, Inc. NOTE: If a hearing is deemed necessary, applicant requests it be held at Orlando, Jacksonville, or Miami, Fla.

No. MC 136132, filed November 1, 1971. Applicant: BOAT MOVING ENGINEERS, INC., 12401 Greiner Street, Detroit, MI 48205. Applicant's representative: Robert A. Sullivan, 1800 Buhl Building, Detroit, Mich. 48226. Authority sought to operate as a common carrier, by motor vehicle, over irregular routes, transporting: Boats, boat equipment, boat supplies and boat parts, when moving with boats, between Michigan, on the one hand, and points in Ohio, Pennsylvania, and Kentucky, on the other. NOTE: If a hearing is deemed necessary, applicant requests it be held at Detroit, Mich.

No. MC 136135, filed October 14, 1971. Applicant: CHARLES E. POWERS, doing business as POWERS SERVICE, 1912 Tarry Lake Road, Fort Collins, CO 80521. Applicant's representative: Robert S. Stauffer, 3539 Boston Road, Cheyenne, WY 82001. Authority sought to operate as a common carrier, by motor vehicle, over irregular routes, transporting: Wrecked or disabled motor vehicles and replacements therefor, by use of wrecker equipment only, between points in Denver, Weld, and Larimer Counties, Colo., on the one hand, and, on the other hand, points in Idaho, Kansas, Montana, New Mexico, Nebraska, South Dakota, Texas, Utah, and Wyoming. NOTE: If a hearing is deemed necessary, applicant requests it be held at Denver, Colo., or Cheyenne, Wyo.

No. MC 136140, filed October 25, 1971. Applicant: ROCKDALE SERVICES, INC., 153-58 Rockaway Boulevard, Jamaica, NY 11434. Applicant's representative: Morris Konig, 150 Broadway, New York, NY 10038. Authority sought to operate as a common carrier, by motor vehicle, over irregular routes, transporting: Luggage and personal property usually carried by airline passengers, between La Guardia Airport and John F. Kennedy International Airport, New York, N.Y., and Newark Airport, Newark, N.J., on the one hand, and, on the other, points in New York, Connecticut, Massachusetts, Rhode Island, New Jersey, Pennsylvania, Maryland, Delaware, and the District of Columbia. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority. If a hearing is deemed necessary, applicant requests it be held at New York, N.Y.

MOTOR CARRIERS OF PASSENGERS

No. MC 3700 (Sub-No. 67), filed October 26, 1971. Applicant: MANHATTAN TRANSIT COMPANY, a corporation, Route 46, East Paterson, N.J. 07407. Applicant's representative: Robert E. Goldstein, 8 West 40th Street, New York, NY 10018. Authority sought to operate as a common carrier, by motor vehicle, over irregular routes, transporting: Passen-

gers and their baggage in the same vehicle with passengers, in round-trip special operations, beginning and ending at Fort Lee and Hackensack, N.J., and extending to Delaware Park Race Track, Stanton, Del., Green Mountain Park Race Track, Pownal, Vt., and Liberty Bell Park Race Track, Philadelphia, Pa., restricted to service during the authorized racing seasons of the above-named race tracks. NOTE: Common control may be involved. If a hearing is deemed necessary, applicant requests it be held at New York, N.Y.

No. MC 34319 (Sub-No. 11), filed August 12, 1971. Applicant: A. B. C. COACH LINES, INC., 116 West Rudisill Boulevard, Fort Wayne, IN 46807. Applicant's representative: Warren C. Young, 401 East Jackson Street, Muncie, IN 47305. Authority sought to operate as a common carrier, by motor vehicle, over regular and irregular routes, transporting: Passengers and their baggage, and express and newspapers, in the same vehicle with passengers, over regular routes: (1) between Fort Wayne, Ind., and Richmond and Muncie, Ind., as follows: From Fort Wayne over U.S. Highway 27 to Richmond (also from Fort Wayne over U.S. Highway 27 as specified above, to Winchester, Ind., thence over Indiana Highway 32 to Muncie), and return over the same routes, serving all intermediate points; (2) between Fort Wayne, Ind. and South Bend, Ind., over U.S. Highway 33, serving all intermediate points; (3) between Fort Wayne, Ind., and junction Indiana Highway 9 and U.S. Highway 33, from Fort Wayne over Indiana Highway 427 to Auburn, thence over U.S. Highway 27 to Garrett, thence over Indiana Highway 327 to U.S. Highway 6, thence over U.S. Highway 6 to Kendallville and Ligonier, thence over Indiana Highway 9 through Albion to junction U.S. Highway 33, and return over the same route, serving all intermediate points; (4) between Muncie and Portland, Ind., from Muncie over Indiana Highway 67 to Albany, thence over Indiana Highway 167 to Dunkirk, thence over county road to Redkey, thence over Indiana Highway 1 to junction Indiana Highway 67, thence over Indiana Highway 67 to Portland and return over the same route, serving all intermediate points; (5) between Ligonier and Syracuse, Ind., from Ligonier over U.S. Highway 6 to junction Indiana Highway 13-A, thence over Indiana Highway 13-A to junction Indiana Highway 313, thence over unnumbered county roads in a circuitous manner around Lake Syracuse via Wawasee, South Shore, and Cedar Point to junction Indiana Highway 13-A, thence return over the same route, serving all intermediate points;

(6) between Muncie and Anderson, Ind., over Indiana Highway 32, and return over the same route, serving all intermediate points; (7) between Anderson and Lebanon, Ind., over Indiana Highway 32, and return over the same route, serving all intermediate points; (8) between Fort Wayne and Garrett, Ind., over Indiana Highway 327, and return over the same route, serving all intermediate points; (9) between Elwood

and Indianapolis, Ind., from Elwood over Indiana Highway 13 to junction Indiana Highways 37 and 37A, and return over the same route, serving all intermediate points; (10) between Ligonier and South Bend, Ind., from Ligonier over U.S. Highway 33 to junction U.S. Highway 6, thence over U.S. Highway 6 to junction Indiana Highway 331, thence over Indiana Highway 331 to Mishawaka, Ind., thence over U.S. Highway 33 to South Bend, and return over the same route, serving all intermediate points; (11) between Richmond and New Castle, Ind., over Indiana Highway 38, and return over the same route, serving all intermediate points; (12) between New Castle and Muncie, Ind., over Indiana Highway 3, and return over the same route, serving all intermediate points; (13) between Muncie and Mount Summit, over Indiana Highway 3 and unnumbered county highway in a southwesterly direction through Cowan, Oakville, and Springport and return over the same route, serving all intermediate points; (14) between Muncie and Richmond, Ind., over U.S. Highway 35, and return over the same route, serving all intermediate points;

(15) Between Muncie and Anderson, Ind., from Muncie over Indiana Highway 67 to junction Indiana Highway 232, thence over Indiana Highway 232 to junction Indiana Highway 32, thence over Indiana Highway 32 to Anderson, and return over the same route, serving all intermediate points; excepting that no passengers, baggage, light express, newspapers, or mail will be received or discharged at Anderson or Muncie, whose entire ride is between the terminal points of Anderson and Muncie; and excepting on Highways 32 and 232, into Anderson; (16) between junction Indiana Highways 67 and 232 and Indianapolis, Ind., over Indiana Highway 67, and return over the same route, serving all intermediate points; provided that no passengers shall be transported whose points of origin or destination is between the junction of Indiana Highways 67 and 9, immediately south of Anderson, Ind., into Indianapolis, Ind.; (17) (a) between junction Indiana Highway 67 and unnumbered highway (designated as Main Street) and Anderson, Ind., over unnumbered highway (designated as Main Street), serving all intermediate points, and (b) between Anderson, Ind., and the plantsite of Guide Lamp, Inc., located on Indiana Highway 9, near Anderson, Ind., from Anderson over Indiana Highway 9 to said plantsite of Guide Lamp, Inc., serving all intermediate points, and limited to employees of said plant and to facilities whose point of origin or destination is east of the city limits of Anderson, Ind.; (18) between Fort Wayne and Kendallville, Ind., over Indiana Highway 3, serving all intermediate points; (19) between junction Indiana Highways 32 and 37 and Indianapolis, Ind., over Indiana Highway 37 to junction Indiana Highway 37A, thence over Indiana Highway 37A to Indianapolis, Ind., and return over the same route, serving all intermediate points;

(20) (a) Between Indiana Highways 37 and 37A near Indianapolis, Ind., as

follows: From Noblesville over Indiana Highway 238 to junction Indiana Highway 37; (b) from Indiana Highway 37A located at Ben Hur over county road designated as County Line Road and as 116th Street to junction Indiana Highway 37; (c) from junction Indiana Highway 37A over county road designated as County Line Road and 96th Street to junction Indiana Highway 37; (d) from Indiana Highway 37A at Allisonville over highway designated as 86th Street and Indiana Highway 100, through the town of Castleton to Indiana Highway 37; (e) from Indiana Highway 37A over 75th Street to junction Indiana Highway 37; (f) from Indiana Highway 37A over 62d Street to junction Indiana Highway 37; (g) from Indiana Highway 37A over Kessler Boulevard, to junction Indiana Highway 37; (h) from Indiana Highway 37A over 56th Street to junction Indiana Highway 37; (i) from Indiana Highway 37A over 46th Street to junction Indiana Highway 37; and return over the same routes in (a) through (i) above, serving all intermediate points; (21) between Winchester and Union City, Ind., from Winchester over Indiana Highway 32 to junction Indiana Highway 227, thence over Indiana Highway 227 to Union City, and return over the same route, serving all intermediate points; (22) between Richmond and Connersville, Ind., from Richmond over U.S. Highway 27 to Liberty, thence over Indiana Highway 44 to Connersville, and return over the same route, serving all intermediate points, except no service to be rendered between Richmond and Liberty;

(23) Between Anderson and Connersville, Ind., from Anderson over Indiana Highway 236 to Middletown, thence over County Road to Indiana Highway 38, thence over Indiana Highway 38 through Cadiz to New Castle, thence over County Road through New Lisbon to Dublin, thence over U.S. Highway 40 to Cambridge City, thence over Indiana Highway 1 through Milton to Connersville and return over the same route, serving all intermediate points; (24) between New Castle and Middletown, Ind., from New Castle over Indiana Highway 3 to Junction U.S. Highway 36, thence over U.S. Highway 36 and County Roads to Middletown and return over the same route, serving all intermediate points, and (25) between Richmond and Cambridge City, Ind., over U.S. Highway 40, serving all intermediate points. Irregular routes: *Passengers and their baggage, light express, newspapers and mail*, in special or charter operations, between points in Indiana. NOTE: Applicant's purpose is to modify and alter its Interstate Commerce Commission operating authority under MC 34319 to coincide with its Public Service Commission of Indiana intrastate authority under No. 88A. Applicant's evidence will be confined to the support of such purpose. If a hearing is deemed necessary, applicant requests it be held at Indianapolis, Ind.

No. MC 135354 (Sub-No. 2), filed October 4, 1971. Applicant: STATESVILLE MOTOR COACH CO., INC., 109 Winston Avenue, Statesville, NC 28677. Applicant's representative: Charles Eph-

raim, 1250 Connecticut Avenue, Suite 600, Washington, DC 20036. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Passengers and their baggage*, in charter operations, beginning and ending at points in Iredell County, N.C., and extending to points in the United States in and east of Wisconsin, Illinois, Missouri, Arkansas, and Louisiana. NOTE: If a hearing is deemed necessary, applicant requests it be held at Statesville, N.C.

No. MC 136139, filed October 18, 1971. Applicant: VIKEN BUS CHARTER SERVICE, INC., 2018 Sugar Grove, Indianapolis, IN 46202. Applicant's representative: Walter F. Jones, Jr., 601 Chamber of Commerce Building, Indianapolis, Ind. 46202. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Passengers and their baggage*, in round-trip charter and special service, beginning and ending at points in Marion County, Ind., and extending to points in the United States (except Alaska and Hawaii). NOTE: If a hearing is deemed necessary, applicant requests it be held at Indianapolis, Ind.

APPLICATIONS FOR BROKERAGE LICENSES

No. MC 12379 (Sub-No. 1), filed October 14, 1971. Applicant: PARKER TOURS, INC., 125 West 43d Street, New York, NY 10036. For a license (BMC 5) to engage in operations as a *broker* at Bergenfield, N.J., as well as at the presently authorized point of New York, N.Y., in arranging for transportation by motor vehicle, in interstate or foreign commerce, of *passengers and their baggage*, between points in the United States.

No. MC 130158, filed October 18, 1971. Applicant: JAMES ALAN VITEZ, 62 Upland Road, Wyomissing Hills, PA. For a license (BMC-4) to engage in operations as a *broker* at Reading, Pa., and Washington, D.C., in arranging for the transportation by motor vehicle, in interstate or foreign commerce of *articles*, which because of size or weight require the use of special equipment; contractors equipment; heavy and bulky articles; machinery; machine parts; self-propelled articles weighing 15,000 pounds or more and related machinery, tools parts, supplies, moving in connection therewith and other equipment which are a part of the contents of an industrial plant to be moved as a unit from one location to another (except commodities in bulk), between points in the United States (except Alaska and Hawaii).

APPLICATION FOR WATER CARRIER

No. W-405 (Sub-No. 10) (PALANTIC STEAMSHIP CO., INC., Extension—Tug and Barge), filed September 22, 1971. Applicant: PALANTIC STEAMSHIP CO., INC., 1409 25th Avenue, Longview, WA 98632. Applicant's representative: John Cunningham, 500 Tower Building, Washington, DC 20005. By application filed September 22, 1971, applicant seeks a revision of permit No. W-405 to operate as a contract carrier, in interstate or

foreign commerce, by non-self-propelled vessels with the use of separate towing vessels, in the transportation of *lumber and lumber products*, from the port of Longview, Wash., to the ports of Providence and Portsmouth, R.I.; New London and New Haven, Conn.; New York, N.Y.; Philadelphia, Pa.; Wilmington, Del., and Baltimore, Md.

APPLICATIONS IN WHICH HANDLING WITHOUT ORAL HEARING HAS BEEN REQUESTED

No. MC 114965 (Sub-No. 45), filed October 27, 1971. Applicant: CYRUS TRUCK LINE, INC., Post Office Box 327, Iola, KS 66749. Applicant's representative: Charles H. Apt, 104 South Washington, Iola, KS 66749. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Fertilizer and fertilizer materials*, from points in Douglas County, Kans., to points in Iowa, Missouri, Nebraska, Arkansas, Oklahoma, and Minnesota. NOTE: Applicant states that the requested authority cannot be tacked with its existing authority.

No. MC 133401 (Sub-No. 3), filed November 1, 1971. Applicant: DONALD G. BEACHLER, doing business as B & B TRUCKING, 2949 Standiford, Modesto, CA 95350. Applicant's representative: J. Wilmar Jensen, 1514 H Street, Modesto, CA 95354. Authority sought to operate as a *contract carrier*, by motor vehicle, over irregular routes, transporting: *Manufactured dry fertilizer*, in bulk, from Lathrop, San Joaquin County, Calif., to points in the counties of Klamath, Lake, and Jackson, all in the State of Oregon, in addition to authority which has previously been granted to operate from Richmond, Shell Point, and Nickols, Calif., to the above-mentioned Oregon counties; also, applicant is presently requesting an amendment (133401 Sub 2) permitting operations from Helm, Fresno County, Calif., to the above-mentioned Oregon counties, under contract with Collier's customers, Occidental's customers and Simplot's customers.

No. MC 136048 (Sub-No. 1) (Correction), filed September 10, 1971, published FEDERAL REGISTER, issue of October 29, 1971, as No. MC 136058, and republished as corrected this issue. Applicant: NEIL J. NEWLAND, doing business as NEWLAND'S GARAGE, Sixth and Locust, Wellsville, KS 66092. Applicant's representative: John L. Richeson, First National Bank Building, Ottawa, Kans. 66067. Authority sought to operate as a *common carrier*, by motor vehicle, over irregular routes, transporting: *Farm implements, machinery, and farm equipment*, assembled and unassembled, machinery and farm equipment, assembled and unassembled, between points in Kansas, Missouri, Oklahoma, Nebraska, Illinois, Texas, Iowa, and Colorado. NOTE: The purpose of this republication is to show that the application has been reassigned No. MC 136048 (Sub-No. 1). The rest of the notice remains as previously published.

By the Commission.

[SEAL] ROBERT L. OSWALD,
Secretary.

[FR Doc. 71-17143 Filed 11-24-71; 8:45 am]

SECURITIES AND EXCHANGE COMMISSION

[812-3009]

E. I. DU PONT DE NEMOURS & CO.

Notice of Filing of Application for Order Exempting Proposed Trans- action

NOVEMBER 19, 1971.

Notice is hereby given that E. I. du Pont de Nemours & Co. (Applicant), Wilmington, Del. 19898, a Delaware corporation, has filed an application pursuant to section 17(b) of the Investment Company Act of 1940 (Act) for an order exempting the proposed grant of certain exclusive licenses and rights to Applicant's technical information and patents in Mexico to Policron de Mexico, S.A. (Policron), a Mexican corporation. All interested persons are referred to the application on file with the Commission for a full statement of the representations therein, which are summarized below.

Christiana Securities Co. (Christiana), a registered closed-end investment company, owns approximately 28.4 percent of the outstanding common stock of Applicant, which in turn owns 49 percent of the outstanding common stock of Policron. Under section 2(a)(9) of the Act, both Applicant and Policron are presumed to be controlled by Christiana and, under section 2(a)(3) of the Act, both Applicant and Policron are also affiliated persons of Christiana.

Policron, a manufacturer of polyester fibers since 1965, has expanded its manufacturing facilities to include the manufacture of additional types of fibers and the polymers used in polyester fiber manufacture. Accordingly, Policron seeks to acquire from Applicant exclusive technical information and patent rights in Mexico with respect to such fibers and polymers.

In consideration for exclusive rights to this package of technical information and patents, Policron has agreed to pay Applicant fees and royalties at the rate of four percent (4.0%) of the "net selling price" (gross sales price less customer discounts, sales taxes and transportation expenses) of all quantities of polyester fibers manufactured and used or sold by Policron or any sublicensee of Policron. The fees and royalties will be in effect on polyester fibers used or sold that are manufactured on or before December 31, 1981. Applicant states that the fees and royalties and other provisions of the licenses have been negotiated on an arm's-length basis, and Applicant believes that the terms thereof are fair to both parties.

Section 17(a) of the Act prohibits an affiliated person of a registered investment company from purchasing from such company or any company controlled by such registered investment company any security or other property, with certain exceptions not here applicable. Section 17(b) of the Act provides that the Commission shall issue an order exempting a proposed transaction from one or more provisions of section 17(a)

if the Commission finds, upon application, that the terms of the proposed transaction are reasonable and fair and do not involve overreaching on the part of any person concerned and that the proposed transaction is consistent with the policy of the registered investment company and the general purposes of the Act.

Notice is further given that any interested person may, no later than December 9, 1971, at 5:30 p.m., submit to the Commission in writing a request for a hearing on the matter accompanied by a statement as to the nature of his interest, the reason for such request and the issues of fact or law proposed to be controverted, or he may request that he be notified if the Commission should order a hearing thereon. Any such communication should be addressed: Secretary, Securities and Exchange Commission, Washington, D.C. 20549. A copy of such request shall be served personally or by mail (airmail if the person being served is located more than 500 miles from the point of mailing) upon Applicant at the address stated above. Proof of such service (by affidavit or in case of an attorney at law by certificate) shall be filed contemporaneously with the request. At any time after said date, as provided by Rule 0-5 of the rules and regulations promulgated under the Act, an order disposing of the application herein may be issued by the Commission upon the basis of the information stated in said application, unless an order for hearing upon said application shall be issued upon request or upon the Commission's own motion. Persons who request a hearing, or advice as to whether a hearing is ordered, will receive notice of further developments in this matter, including the date of the hearing (if ordered) and any postponements thereof.

For the Commission, by the Division of Corporate Regulation, pursuant to delegated authority.

[SEAL]

GLADYS E. GREER,
Assistant Secretary.

[PR Doc.71-17207 Filed 11-24-71; 8:48 am]

[70-4703]

KINGSPORT POWER CO.

Notice of Third Post-Effective Amend- ment Regarding Issue and Sale of Short-Term Notes to Banks

NOVEMBER 19, 1971.

Notice is hereby given that Kingsport Power Co. (Kingsport), 40 Franklin Road, Roanoke, VA 24009, a public-utility subsidiary company of American Electric Power Company, Inc., a registered holding company, has filed with this Commission a third posteffective amendment to its application in this proceeding pursuant to section 6(b) of Public Utility Holding Company Act of 1935 (Act) regarding the following proposed transactions. All interested persons are referred to the amended application, which is summarized below, for a complete statement of the proposed transactions.

By order dated January 17, 1969 (Holding Company Act Release No. 16268), the Commission authorized Kingsport to issue and sell its notes to two commercial banks prior to December 31, 1969, in an aggregate amount not to exceed \$2,500,000 outstanding at any one time. By supplemental orders dated December 15, 1969, and December 24, 1970 (Holding Company Act Releases Nos. 16553 and 16922), the Commission authorized Kingsport to increase the amount of its notes outstanding at any one time to \$3,500,000 and to extend the period of issuance until December 31, 1971. Kingsport now proposes that the notes be issued prior to December 31, 1972, in an aggregate amount not to exceed \$4 million outstanding at any one time. Kingsport requests the Commission's approval of the issue and sale of such amount of notes not already exempt pursuant to the first sentence of section 6(b) of the Act. The notes will be issued and sold to Manufacturers Hanover Trust Co., New York, N.Y. and Morgan Guaranty Trust Company of New York, N.Y., in the aggregate principal amounts of \$2,500,000 and \$1,500,000, respectively; will mature not later than 270 days after the date of the issue or renewal; and will bear interest from the date thereof at the prime credit rate in effect from time to time or at the time the borrowing is made. Kingsport will maintain compensating balances of 20 percent, which are the currently prevailing balance requirements at the two banks named, and the effective interest cost to Kingsport of the issuance and sale of the notes to such banks will be approximately 6.9 percent based on the current prime commercial credit rate of 5½ percent. The notes may be prepaid at any time, in whole or in part, without premium. As of November 1, 1971, Kingsport had outstanding \$2,500,000 of short-term notes.

Kingsport will use the proceeds from the sale of the notes to repay bank loans the proceeds of which were used for past expenditures in connection with its construction program, to provide funds to finance, in part, its future construction program, estimated for 1972 to cost approximately \$2,400,000, and for other corporate purposes. It is stated that all of Kingsport's notes payable to banks outstanding at the time of its next permanent financing will be paid from the proceeds of that financing.

It is represented that no State commission and no Federal commission, other than this Commission, has jurisdiction over the proposed transactions.

Notice is further given that any interested person may, no later than December 13, 1971, request in writing that a hearing be held on such matter, stating the nature of his interest, the reasons for such request, and the issues of fact or law raised by said posteffective amendment to the application which he desires to controvert; or he may request that he be notified if the Commission should order a hearing thereon. Any such request should be addressed: Secretary, Securities and Exchange Commission, Washington, D.C. 20549. A copy of such request should be served personally or by mail (airmail if the person being served

is located more than 500 miles from the point of mailing) upon the applicant at the above-stated address, and proof of service (by affidavit or, in case of an attorney at law, by certificate) should be filed with the request. At any time after said date, the application, as now amended or as it may be further amended, may be granted as provided in Rule 23 of the general rules and regulations promulgated under the Act, or the Commission may grant exemption from such rules as provided in Rules 20(a) and 100 thereof or take such other action as it may deem appropriate. Persons who request a hearing or advice as to whether a hearing is ordered will receive notice of further developments in this matter, including the date of the hearing (if ordered) and any postponements thereof.

For the Commission, by the Division of Corporate Regulation, pursuant to delegated authority.

[SEAL] **GLADYS E. GREER,**
Assistant Secretary.

[FR Doc.71-17208 Filed 11-24-71;8:49 am]

[811-1150]

TECHNICAL CAPITAL CORP.

Notice of Proposal To Terminate Registration

NOVEMBER 19, 1971.

Notice is hereby given that the Commission proposes, pursuant to section 8(f) of the Investment Company Act of 1940 (Act), to declare by order upon its own motion that Technical Capital Corp. (Technical), 235 East 42d Street, New York, NY, registered as a closed-end non-diversified management investment company under the Act, has ceased to be an investment company.

Technical registered under the Act on February 1, 1962, as a small business investment company. Information available to the Commission indicates that Technical has never engaged in the business of being an investment company; that its registration statement under the Securities Act of 1933 was withdrawn on August 14, 1962; and that it has less than 100 shareholders.

Section 3(c) (1) of the Act provides, in pertinent part, that any issuer whose outstanding securities are beneficially owned by not more than 100 persons and which is not making and does not presently propose to make a public offering is not an investment company within the meaning of the Act.

Section 8(f) of the Act provides, in pertinent part, that when the Commission, on its own motion, finds that a registered investment company has ceased to be an investment company, it shall so declare by order, and that upon the effectiveness of such order, which may be issued upon the Commission's own motion where appropriate, the registration of such company shall cease to be in effect.

Notice is further given that any interested person may, not later than Decem-

ber 10, 1971, at 5:30 p.m., submit to the Commission in writing a request for a hearing on the matter accompanied by a statement as to the nature of his interest, the reason for such request, and the issues of fact or law proposed to be controverted, or he may request that he be notified if the Commission shall order a hearing thereon. Any such communication should be addressed: Secretary, Securities and Exchange Commission, Washington, D.C. 20549. A copy of such request shall be served personally or by mail (airmail if the person being served is located more than 500 miles from the point of mailing) upon Technical at the address set forth above. Proof shall be filed contemporaneously with the request. At any time after said date, as provided by Rule 0-5 of the rules and regulations under the Act, an order disposing of the matter may be issued by the Commission upon the basis of the information stated in this notice, unless an order for hearing upon this matter shall be issued upon request or upon the Commission's own motion. Persons who request a hearing or advice as to whether a hearing is ordered will receive notice of further developments in this matter, including the date of the hearing (if ordered) and any postponements thereof.

For the Commission, by the Division of Corporate Regulation, pursuant to delegated authority.

[SEAL] **GLADYS E. GREER,**
Assistant Secretary.

[FR Doc.71-17209 Filed 11-24-71;8:49 am]

TARIFF COMMISSION

[AA1921-84]

DIAMOND TIPS FROM UNITED KINGDOM

Notice of Investigation and Hearing

Having received advice from the Treasury Department on November 18, 1971, that diamond tips for phonograph needles from the United Kingdom are being, or are likely to be, sold at less than fair value, the U.S. Tariff Commission has instituted an investigation under section 201(a) of the Antidumping Act, 1921, as amended (19 U.S.C. 160(a)), to determine whether an industry in the United States is being or is likely to be injured, or is prevented from being established, by reason of the importation of such merchandise into the United States.

Hearing. A public hearing in connection with the investigation will be held in the Tariff Commission's Hearing Room, Tariff Commission Building, Eighth and E Streets NW., Washington, DC, beginning at 10 a.m., e.s.t., on January 11, 1972. All parties will be given opportunity to be present, to produce evidence, and to be heard at such hearing. Interested parties desiring to appear at the public hearing should notify the Secretary of the Tariff Commission, in writing, at its offices in Washington, D.C., at least 5

days in advance of the date set for the hearing.

Issued: November 22, 1971.

By order of the Commission.

[SEAL] **KENNETH R. MASON,**
Secretary.

[FR Doc.71-17273 Filed 11-24-71;8:53 am]

[TEA-W-122]

GLADDING CORP.

Workers' Petition for Determination of Eligibility To Apply for Adjustment Assistance; Notice of Investigation

On the basis of a petition filed under section 301(a) (2) of the Trade Expansion Act of 1962, on behalf of the workers of the U.S. Fiberglass Division, Gladding Corp., Miami, Fla., the U.S. Tariff Commission, on November 22, 1971, instituted an investigation under section 301(c) (2) of the act to determine whether, as a result in major part of concessions granted under trade agreements, articles like or directly competitive with the fiberglass fishing rods produced by said firm are being imported into the United States in such increased quantities as to cause, or threaten to cause, the unemployment or underemployment of a significant number or proportion of the workers of such company.

The petitioners have not requested a public hearing. A hearing will be held on request of any other party showing a proper interest in the subject matter of the investigation: *Provided*, Such request is filed within 10 days after the notice is published in the FEDERAL REGISTER.

The petition filed in this case is available for inspection at the Office of the Secretary, U.S. Tariff Commission, Eighth and E Streets NW., Washington, DC, and at the New York City office of the Tariff Commission located in room 437 of the Customhouse.

Issued: November 22, 1971.

By order of the Commission.

[SEAL] **KENNETH R. MASON,**
Secretary.

[FR Doc.71-17272 Filed 11-24-71;8:53 am]

TELEVISION RECEIVERS

Report to the President

Industry ineligible for tariff or other assistance.

The U.S. Tariff Commission today reported to the President the results of an investigation under the Trade Expansion Act of television receivers and certain parts thereof.

In the investigation, the Commission found (Commissioner Moore dissenting) that television receivers and parts thereof, provided for in item 685.20 of the Tariff Schedules of the United States, are not, as a result in major part of concessions granted under trade agreements, being imported into the United States in such increased quantities as to cause, or

threaten to cause, serious injury to the domestic industry producing like or directly competitive products.

The investigation (TEA-I-21) was instituted by the Commission in June 1971 on petition of three unions (the International Association of Machinists and Aerospace Workers, AFL-CIO; the International Brotherhood of Electrical Workers, AFL-CIO; and the International Union of Electrical, Radio & Machine Workers, AFL-CIO-CLC) representing workers in the industry. It was conducted under the provisions of section 301(b) of the Trade Expansion

Act of 1962, which establishes the criteria for determining whether a domestic industry is qualified for tariff or other assistance.

A part of the material contained in the report may not be made public since it includes information that would disclose the operations of an individual firm. The Commission, therefore, is releasing to the public only those portions of the report that do not contain business confidential information.

Copies of the public report (TC Publication 436), which contains statements of the reasons for the Commissioners'

findings, will be released as soon as possible. Copies will be available on request as long as the supply lasts. Requests should be addressed to the Secretary, U.S. Tariff Commission, Eighth and E Streets, NW., Washington, DC 20436.

By order of the Commission.

For release: November 19, 1971.

[SEAL] KENNETH R. MASON,
Secretary.

[FR Doc.71-17167 Filed 11-24-71;8:51 am]

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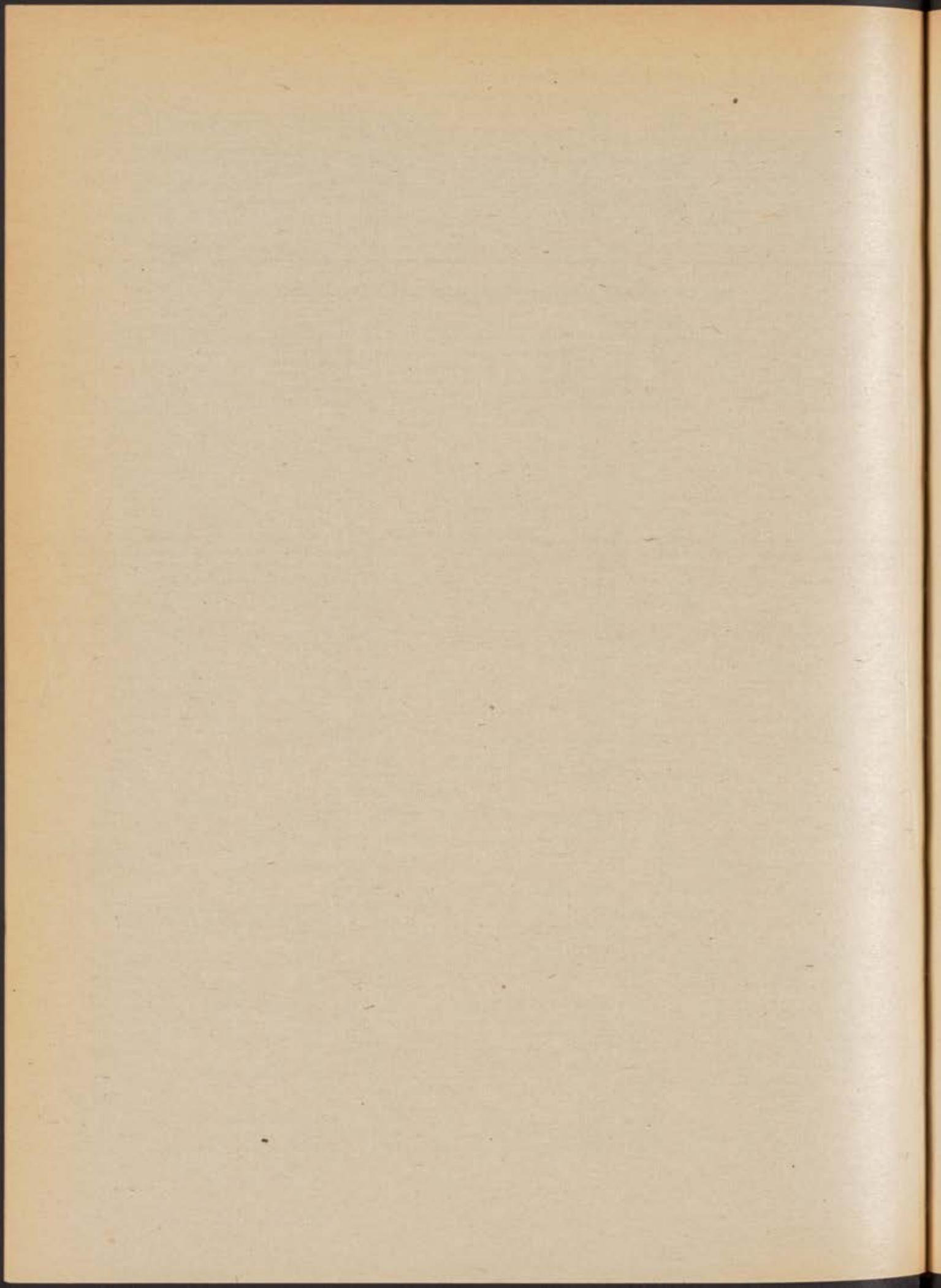
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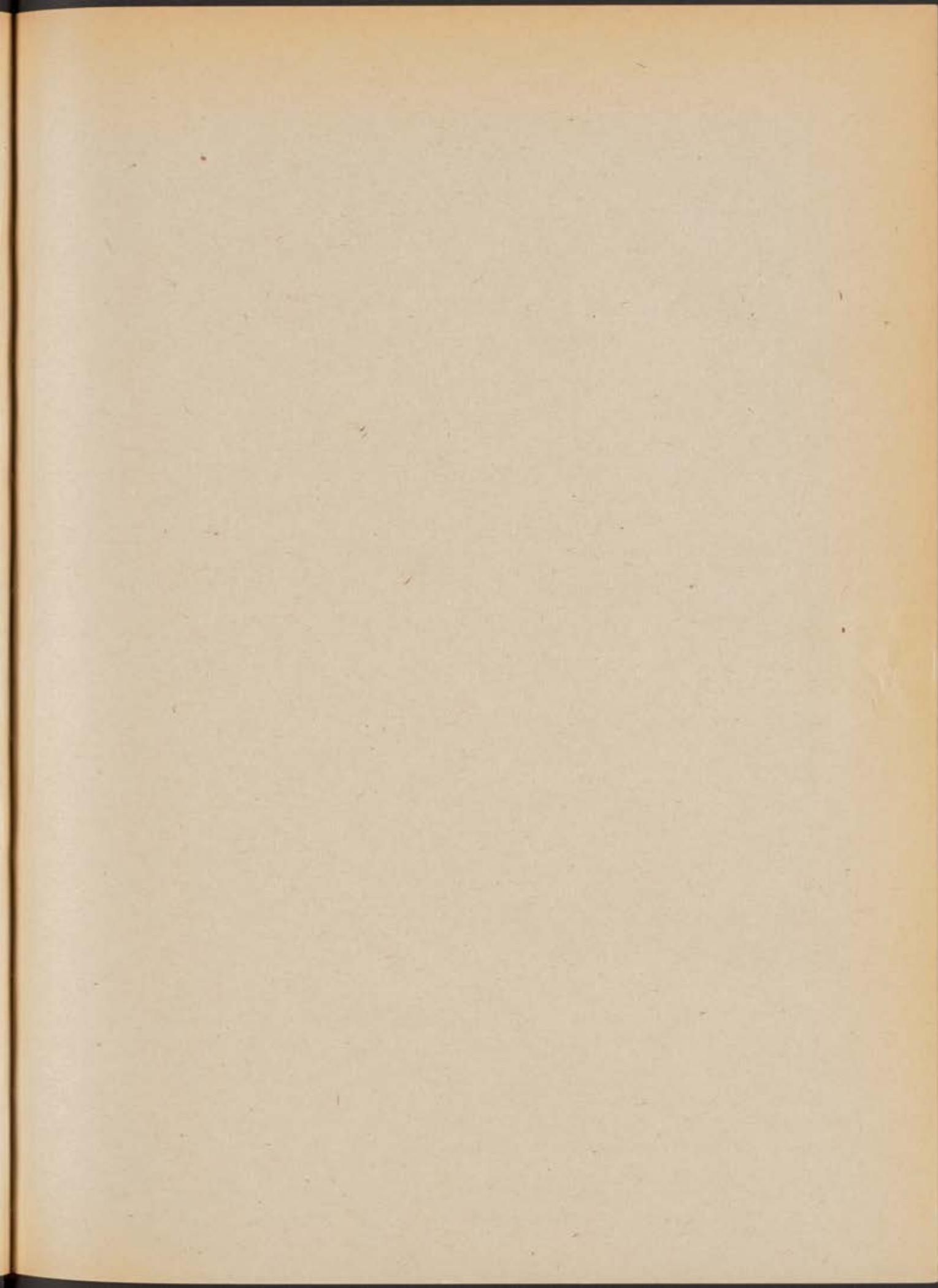
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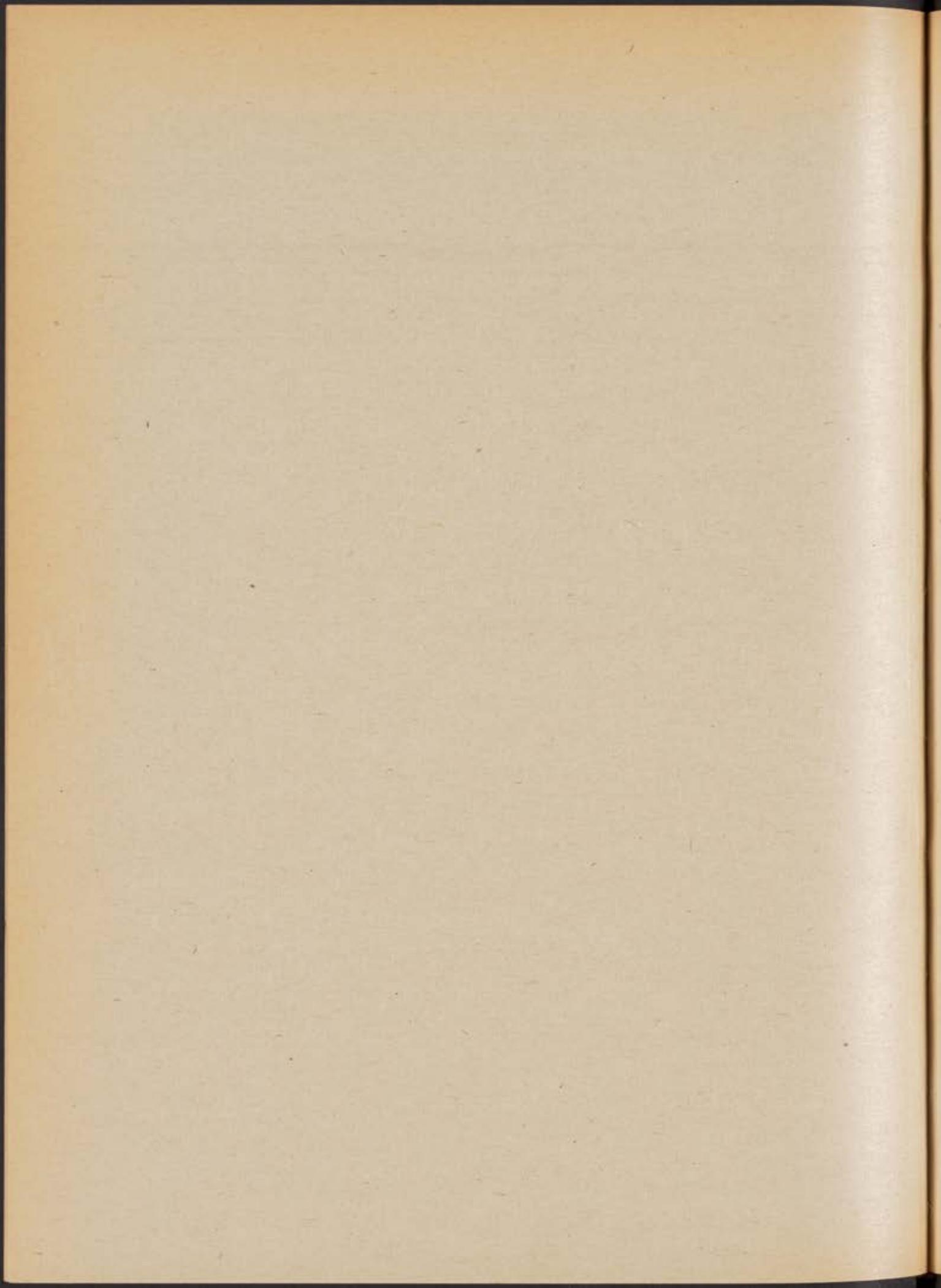
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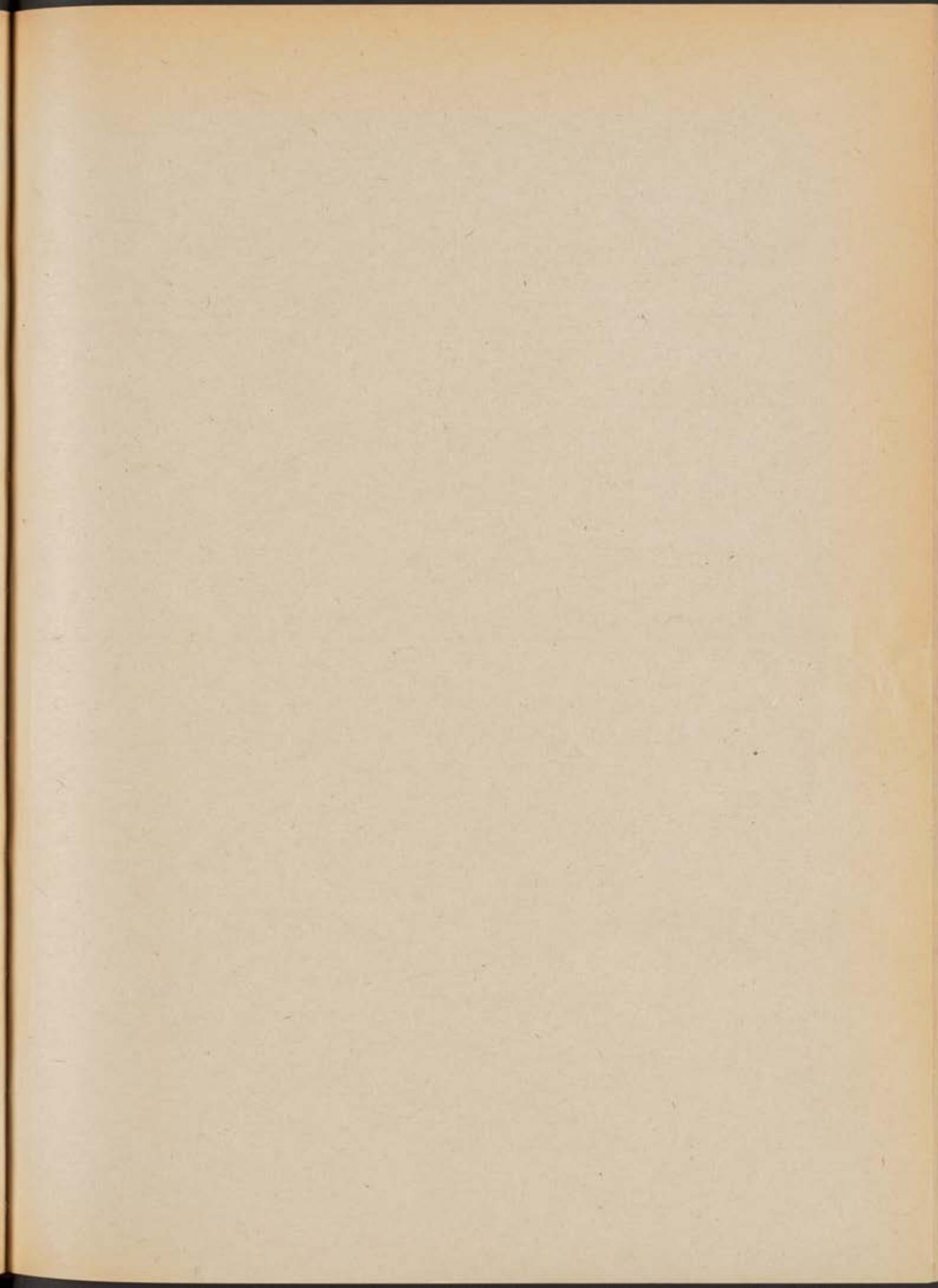
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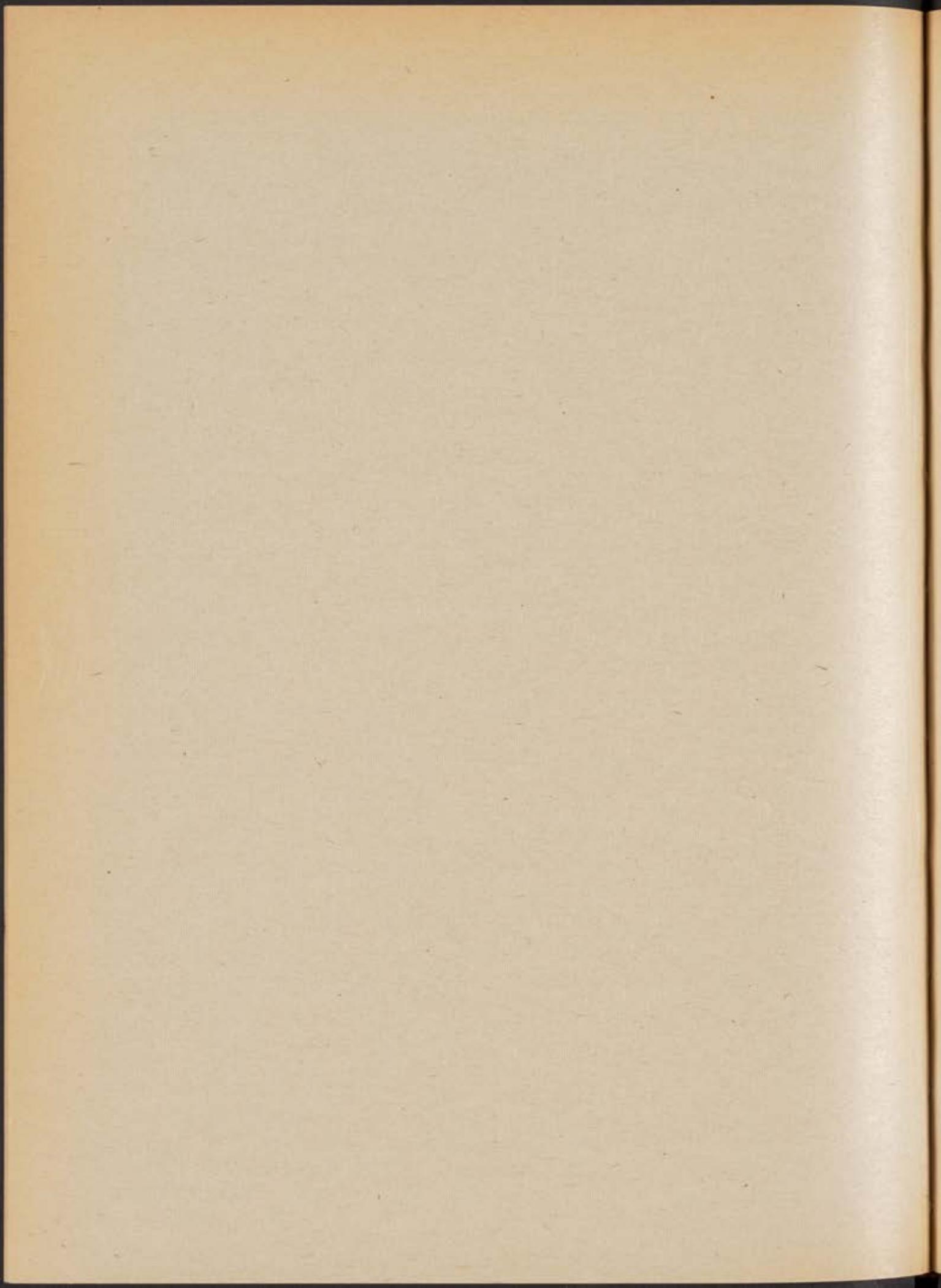
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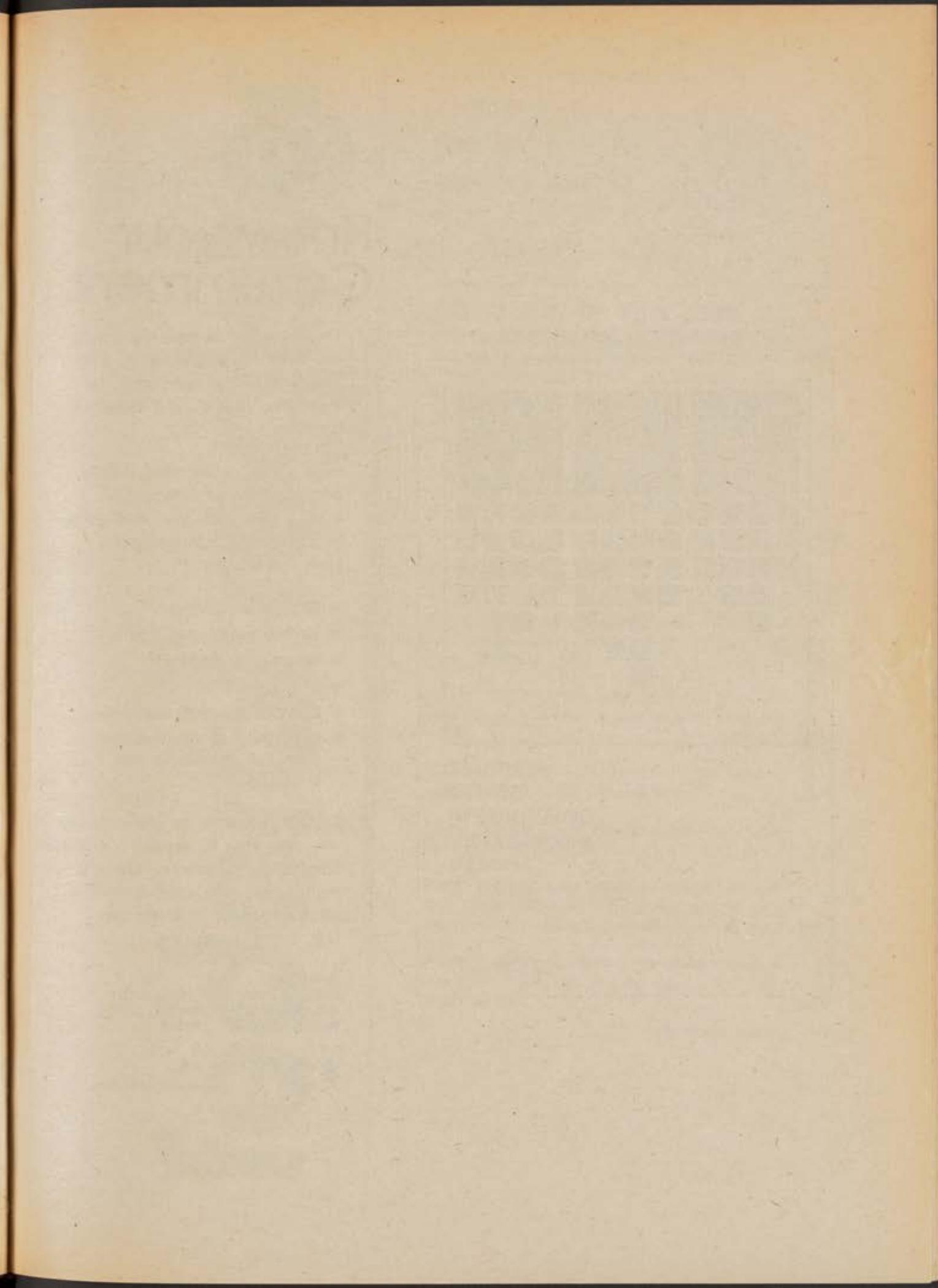






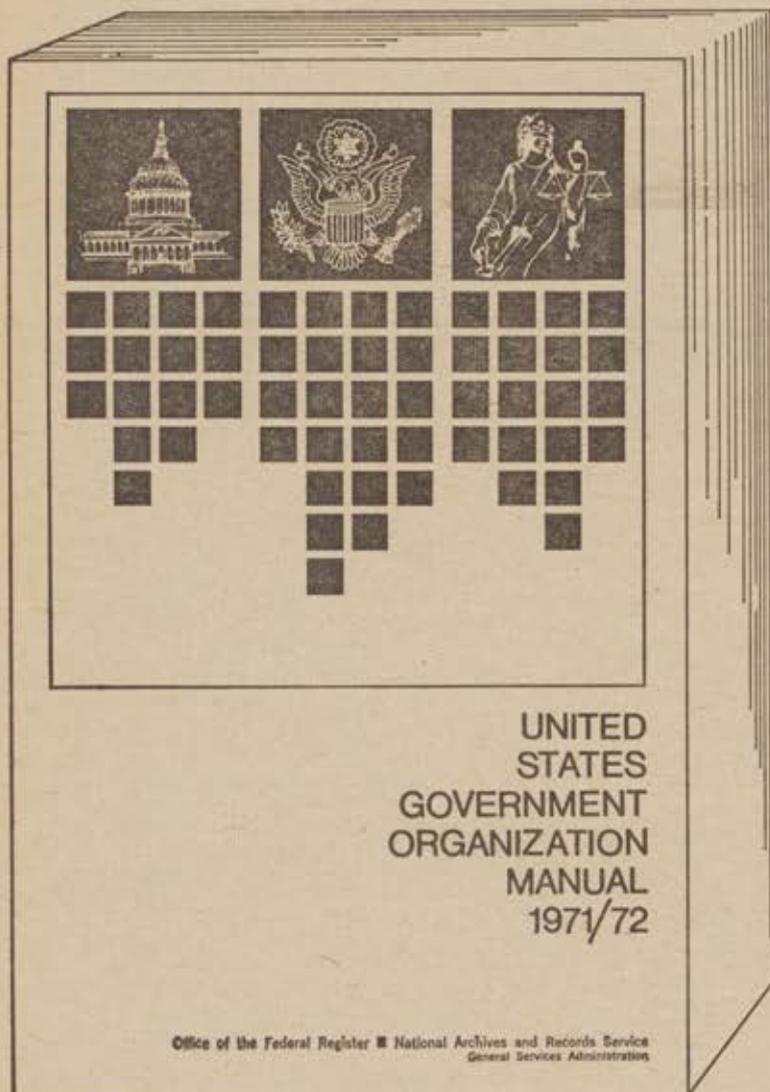








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