maximum distribution of the fumigant. If the fruit is packed in a gas-impervious liner, the liner must be perforated to provide for the entry and aeration of the methyl bromide gas. The individual fruit may be wrapped with tissue paper. Cubic feet of space under fumigation shall include the load of fruit to be fumigated. The exposure period shall begin when all the fumigant which has been introduced into the chamber or enclosure has been volatilized. The fumigation temperatures required in these treatments shall be that of the pulp temperatures of the fruit. Fumigation with methyl bromide shall be in accordance with the following schedules:

(i) Chamber: 1

MB at NAP  $1\frac{1}{2}$  lb for 2 hours at 80–89 °F.

(ii) Tarpaulin truck van and refrigerator railway car fumigation:

MB at NAP

- 11/2 lb/1,000 ft3 for 21/2 hours at 80-89 °F. (18 oz minimum gas concentration at 1/2 hour) (14 oz minimum gas concentration at  $2^{1}/_{2}$ hours) 2 lbs/1 000 ft3 for 21/2 hours at 70-79 °F. (25 oz minimum gas concentration at 1/2 hour) (18 oz minimum gas concentration at 21/2 hours). 21/2 lbs/1,000 ft3 for 21/2 hours at 60-69  $^{\circ}\text{F}$ . (31 oz minimum gas concentration at 1/2 hour) (24 oz minimum gas concentration at 21/2 hours). 3 lbs/1,000 ft3 for 21/2 hours at 50 -59 °F. (36 oz minimum gas concentration at 1/2 hour) (28 oz. minimum gas concentration at 21/2 hours). 4 lb/1,000 ft3 for 21/2 hours at 40-49 °F. (45 oz minimum gas concentration at 1/2 hour) (34 oz minimum gas concentration at 21/2 hours).
- (3) Ports of entry. Apples and pears to be offered for entry under this section may be shipped to any U.S. port where inspectors are located and which are named in the permit.
- (4) Supervision of treatment. The treatment approved in this section must be conducted under the supervision of an inspector of the plant protection and quarantine programs. The inspector

shall require such safeguards in each specific case for unloading and handling of the fruit at the port of entry, transportation of the fruit from the place of unloading to the treatment facilities, and its handling during fumigation and aeration as required by paragraph (a)(2) of this section, as he deems necessary to prevent the spread of insect pests and assure compliance with the provisions of this subpart.

- (5) Costs. All costs of treatment, required safeguards, and supervision, other than the services of the supervising inspector during regularly assigned hours of duty and at the usual place of duty, shall be borne by the owner of the fruit or his representative.
- (6) Department not responsible for damages. The treatment prescribed in paragraph (a)(2) of this section is judged from experimental tests and uses for quarantine purposes to be safe for fumigation of apples and pears. However, the Department assumes no responsibility for any damage sustained through or in the course of the treatment or because of safeguards required under paragraph (a)(4) of this section.

[38 FR 9005, Apr. 9, 1973, as amended at 47 FR 13320, Mar. 30, 1982. Redesignated at 50 FR 9788, Mar. 12, 1985]

## § 319.56-2k Administrative instructions prescribing method of fumigation of field-grown grapes from specified countries.

Approved fumigation with methyl bromide at normal atmospheric pressure, in accordance with the following procedure, is hereby prescribed as a condition of entry under permit for all shipments of field-grown grapes from the continental countries of southern and middle Europe, North Africa, and the Near East listed in paragraph (a) of this section. This fumigation shall be in addition to other conditions prescribed in the permit as conditions of entry for field-grown grapes from the areas named.

(a) Continental countries of southern and middle Europe, North Africa, and the Near East. As used in this section, the term "continental countries of southern and middle Europe, North Africa, and the Near East" means Algeria, Austria, Bulgaria, Cyprus, Egypt,

 $<sup>^{1}\</sup>mathrm{MB}\text{=}\mathrm{methyl}$  bromide; NAP=normal atmospheric pressure.

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France, Germany, Greece, Hungary, Israel, Italy, Libya, Luxembourg, Portugal, Spain, Switzerland, Syria, and Union of Soviet Socialist Republics.

(b) Ports of entry. Grapes to be offered for entry must be shipped from the country of origin to New York or such other North Atlantic ports as may be named in the permit.

(c) Precooling of fruit. Grapes to be offered for entry must be shipped under refrigeration and the fruit may not be removed from the vessel until the inspector has satisfied himself that this requirement has been complied with and that the fruit can be moved promptly for treatment without danger of plant pest dissemination. <sup>1</sup>

(d) Approved fumigation. Approved fumigation shall consist of fumigation with methyl bromide at normal atmospheric pressure in a fumigation chamber that has been approved for that purpose by the Plant Protection and Quarantine Programs. The fumigation may also be accomplished under tarpaulins in a manner, satisfactory to the inspector, that will insure adequate air and fruit temperatures, volatilization, distribution, and concentration of the fumigant. Such fumigation shall be in accordance with the following fumigation schedule:

Temperature, degrees F.	Methyl bromide dos- age in pounds per 1,000 cubic feet	Exposure time—hours
70–79	2 2½ 3 3½	2½ 2½ 2½ 2½ 2½

(e) Supervision of fumigation. Inspectors of the Plant Protection and Quarantine Programs shall supervise the fumigation of grapes and shall prescribe such safeguards as may be necessary for unloading, handling, and transportation preparatory to fumigation or other treatment. The final release of the fruit for entry into the United States will be conditioned upon compliance with prescribed safeguards and required treatments.

- (f) Costs. All costs of treatment and required safeguards and supervision, other than the services of the supervising inspector during regularly assigned hours of duty and at the usual place of duty, shall be borne by the owner of the grapes or his representative.
- (g) Department not responsible for damage. The treatment prescribed in paragraph (d) of this section is judged from experimental tests to be safe for use with field-grown grapes. However, the Department assumes no responsibility for any damage sustained through or in the course of such treatment or by compliance with requirements under paragraph (e) of this section or in the precooling of fruit required prior to unloading from the vessel.

[24 FR 10788, Dec. 29, 1959. Redesignated at 50 FR 9788, Mar. 12, 1985]

## § 319.56-21 Administrative instructions prescribing method of treatment of imported yams.

- (a) Fumigation upon arrival. Except as otherwise provided in paragraph (b) of this section, approved fumigation with methyl bromide at normal atmospheric pressure, in accordance with the following procedure, upon arrival at the port of entry, is hereby prescribed as a condition of importation under permit under §319.56–2 for shipments of yams from all foreign countries.
- (1) Ports of entry. Yams to be offered for entry may be shipped, under permit under §319.56–2, direct from the country of origin to ports in the United States where approved fumigation facilities are available.
- (2) Approved fumigation. (i) The approved fumigation shall consist of fumigation with methyl bromide at normal atmospheric pressure, in a fumigation chamber that has been approved for that purpose by the Plant Protection and Quarantine Programs. The dosage shall be applied at the following

Temperature, (°F.)	Dosage (pounds of methyl bromide per 1,000 cubic feet)	Exposure period (hours)
90–96	2.5	4
80–89	3.0	4
70–79	3.5	4

<sup>&</sup>lt;sup>1</sup>Grapes from countries where the Mediterranean fruit fly occurs are subject to the cold treatment as described in §319.56-2d. Under certain conditions such treatment may be effected in transit or upon arrival at the port of New York.