approved treatment schedule, the volume of the commodity stacked inside the treatment enclosure must not exceed 2/3 of the volume of the enclosure. Stacking must be approved by an official authorized by APHIS before treatment begins. All commodities undergoing treatment must be listed on the label or authorized under Section 18 of FIFRA.

(4) Recording and measuring equipment must be adequate to accurately monitor the gas concentration, to ensure the correct amount of gas reaches the pests, and to detect any leaks in the enclosure. At least three sampling tubes or monitoring lines must be used in the treatment enclosure.

(5) An adequate number of blowers or fans must be used inside of the treatment enclosure to uniformly distribute gas throughout the enclosure. The circulation system must be able to recirculate the entire volume of gas in the enclosure in 3 minutes or less.

(6) The exposure period begins after all gas has been introduced.

(7) For vacuum fumigation: The vacuum pump must be able to reduce pressure in the treatment enclosure to 1-2 inches of mercury in 15 minutes or less.

§ 305.6 Cold treatment requirements.

(a) Certification of treatment facilities. All facilities or locations used for refrigerating fruits or vegetables in accordance with the cold treatment schedules in the PPQ Treatment Manual or in another treatment schedule approved in accordance with §305.2 must be certified by APHIS. Recertification of the facility or carrier is required every 3 years, or as often as APHIS directs, depending on treatments performed, commodities handled, and operations conducted at the facility. In order to be certified, facilities and carriers must:

(1) Be capable of keeping treated and untreated fruits, vegetables, or other articles separate so as to prevent reinfestation of articles and spread of pests;

(2) Have equipment that is adequate to effectively perform cold treatment.

(b) Places of treatment; ports of entry. Precooling and refrigeration may be performed prior to, or upon arrival of fruits and vegetables in the United States, provided treatments are performed in accordance with applicable requirements of this section. Fruits and vegetables that are not treated prior to arrival in the United States must be treated after arrival only in cold storage warehouses approved by the Administrator and located in the area north of 39° latitude and east of 104° longitude or at one of the following ports: The maritime ports of Wilmington, NC; Seattle, WA; Corpus Christi, TX; and Gulfport, MS; Seattle-Tacoma International Airport, Seattle, WA; MidAmerica St. Louis Airport, Mascoutah, IL; and Hartsfield-Atlanta International Airport, Atlanta, GA.

(c) Cold treatment enclosures. All enclosures, in which cold treatment is performed, including refrigerated containers, must:

(1) Be capable of maintaining the highest temperature of the treatment schedule under which the fruit will be treated specified in the PPQ Treatment Manual or in another approved treatment schedule before the treatment begins and holding fruit at or below the treatment temperature during the treatment.

(2) Maintain fruit pulp temperatures according to treatment schedules with no more than a 0.39 °C (0.7 °F) variation in temperature between two consecutive hourly readings.

(3) Be structurally sound and adequate to maintain required temperatures.

(d) Treatment procedures. (1) All material, labor, and equipment for cold treatment performed on a vessel must be provided by the vessel or vessel agent. An official authorized by APHIS monitors, manages, and advises in order to ensure that the treatment procedures are followed.

(2) Refrigeration must be completed in the container, compartment, or room in which it is begun.

(3) Fruit that may be cold treated must be safeguarded to prevent cross-contamination or mixing with other infested fruit.

(4) Fruit intended for in-transit cold treatment must be precooled to no more than the highest temperature of the treatment schedule under which
the fruit will be treated prior to beginning treatment. The in-transit treatment enclosure may not be used for precooling unless an official authorized by APHIS approves the loading of the fruit in the treatment enclosure as adequate to allow for fruit pulp temperatures to be taken prior to beginning treatment. If the fruit is precooled outside the treatment enclosure, an official authorized by APHIS will take pulp temperatures manually from a sample of the fruit as the fruit is loaded for in-transit cold treatment to verify that precooling was completed. If the pulp temperatures for the sample are 0.28 °C (0.5 °F) or more above the highest temperature of the treatment schedule under which the fruit will be treated, the pallet from which the sample was taken will be rejected and returned for additional precooling until the fruit reaches the highest temperature of the treatment schedule under which the fruit will be treated.

(5) Breaks, damage, etc., in the treatment enclosure that preclude maintaining correct temperatures must be repaired before the enclosure is used. An official authorized by APHIS must approve loading of compartment, number and placement of temperature probes or sensors, and initial fruit temperature readings before beginning the treatment. Hanging decks and hatch coamings within vessels may not be used as enclosures for in-transit cold treatment without prior written approval from APHIS. Double-stacking of pallets is not allowed.

(6) Only the same type of fruit in the same type of package may be treated together in a container; no mixture of fruits in containers may be treated. A numbered seal must be placed on the doors of the loaded container and may be removed only at the port of destination by an official authorized by APHIS.

(7) Temperature recording devices used during treatment must be secured using measures approved by APHIS as adequate to ensure the security and integrity of cold treatment data. The devices must be able to record the date, time, and sensor number and automatically and continuously record the temperature during all calibrations and during treatment. Recording devices must be capable of generating temperature charts for verification by an inspector. If records of calibrations or treatments are found to have been manipulated, the vessel or container in which the treatment is performed may be suspended from conducting cold treatments until proper equipment is installed and an official authorized by APHIS has recertified it. APHIS’ decision to recertify a vessel or container will take into account the severity of the infraction that led to suspension.

(8) A minimum of four temperature probes or sensors is required for vessel holds used as treatment enclosures. A minimum of three temperature probes or sensors is required for other treatment enclosures. An official authorized by APHIS will have the option to require that additional temperature probes or sensors be used, depending on the size of the treatment enclosure.

(9) Fruit pulp temperatures must be maintained at the temperature specified in the treatment schedule with no more than a 0.39 °C (0.7 °F) variation in temperature between two consecutive hourly readings. Failure to comply with this requirement will result in invalidation of the treatment unless an official authorized by APHIS can verify that the pulp temperature was maintained at or below the treatment temperature for the duration of the treatment.

(10) The time required to complete the treatment begins when all temperature probes reach the prescribed cold treatment schedule temperature. Refrigeration continues until the vessel arrives at the port of destination and the fruit is released for unloading by an inspector even though this may prolong the period required for the cold treatment.

(11) Temperatures must be recorded at intervals no longer than 1 hour apart. Gaps of longer than 1 hour will
invalidate the treatment or indicate treatment failure unless an official authorized by APHIS can verify that the pulp temperature was maintained at or below the treatment temperature for the duration of the treatment.

(12) Cold treatment is not completed until so declared by an official authorized by APHIS or the certifying official of the foreign country; consignments of treated commodities may not be discharged until APHIS clearance has been fully completed, including review and approval of treatment record charts.

(13) Cold treatment of fruits in break bulk vessels or containers must be initiated by an official authorized by APHIS if there is not a treatment technician who has been trained to initiate cold treatments for either break bulk vessels or containers.

(14) An official authorized by APHIS may perform audits to ensure that the treatment procedures comply with the regulations in this section and that the treatment is administered in accordance with the treatment schedules in the PPQ Treatment Manual or in accordance with another approved treatment schedule. The official authorized by APHIS must be given the appropriate materials and access to the facility, container, or vessel necessary to perform the audits.

(15) An inspector will sample and cut fruit from each consignment cold treated for Mediterranean fruit fly (Medfly) to monitor treatment effectiveness. If a single live Medfly in any stage of development is found, the consignment will be held until an investigation is completed and appropriate remedial actions have been implemented. If APHIS determines at any time that the safeguards contained in this section do not appear to be effective against the Medfly, APHIS may suspend the importation of fruits from the originating country and conduct an investigation into the cause of the deficiency.

(16) The cold treatments required for the entry of fruit are considered necessary for the elimination of plant pests, and no liability shall attach to the U.S. Department of Agriculture or to any officer or representative of that Department in the event injury results to fruit offered for entry in accordance with these instructions. In prescribing cold treatments of certain fruits, it should be emphasized that inexactness and carelessness in applying the treatments may result in injury to the fruit or its rejection for entry.

(e) Monitoring. Treatment must be monitored by an inspector to ensure proper administration of the treatment. An inspector must also approve the recording devices and sensors used to monitor temperatures and conduct an operational check of the equipment before each use and ensure sensors are calibrated. An inspector may approve, adjust, or reject the treatment.

(f) Compliance agreements. Facilities located in the United States must operate under a compliance agreement with APHIS. The compliance agreement must be signed by a representative of the cold treatment facility and APHIS. The compliance agreement must contain requirements for equipment, temperature, circulation, and other operational requirements for performing cold treatment to ensure that treatments are administered properly. Compliance agreements must allow officials of APHIS to inspect the facility to monitor compliance with the regulations.

(g) Workplans. Facilities located outside the United States may operate in accordance with a bilateral workplan. The workplan, if and when required, must be signed by a representative of the cold treatment facility, the national plant protection organization (NPPO) of the country of origin, and APHIS. The workplans must contain requirements for equipment, temperature, circulation, and other operational requirements for performing cold treatment to ensure that cold treatments are administered properly. Workplans for facilities outside the United States may also include trust fund agreement information regarding payment of the salaries and expenses of APHIS employees on site. Workplans must allow officials of the NPPO and APHIS to inspect the facility to monitor compliance with APHIS regulations.

(h) Additional requirements for treatments performed after arrival in the United States.
(1) Maritime port of Wilmington, NC. Consignments of fruit arriving at the maritime port of Wilmington, NC, for cold treatment, in addition to meeting all other applicable requirements of this section, must meet the following special conditions:

(i) Bulk consignments (those consignments which are stowed and unloaded by the case or bin) of fruit must arrive in fruit fly-proof packaging that prevents the escape of adult, larval, or pupal fruit flies.

(ii) Bulk and containerized consignments of fruit must be cold-treated within the area over which the U.S. Department of Homeland Security is assigned the authority to accept entries of merchandise, to collect duties, and to enforce the various provisions of the customs and navigation laws in force.

(iii) Advance reservations for cold treatment space must be made prior to the departure of a consignment from its port of origin.

(iv) The cold treatment facility must remain locked during non-working hours.

(2) Maritime port of Seattle, WA. Consignments of fruit arriving at the maritime port of Seattle, WA, for cold treatment, in addition to meeting all other applicable requirements of this section, must meet the following special conditions:

(i) Bulk consignments (those consignments which are stowed and unloaded by the case or bin) of fruit must arrive in fruit fly-proof packaging that prevents the escape of adult, larval, or pupal fruit flies.

(ii) Bulk and containerized consignments of fruit arriving for cold treatment must be cold treated within the area over which the U.S. Department of Homeland Security is assigned the authority to accept entries of merchandise, to collect duties, and to enforce the various provisions of the customs and navigation laws in force.

(iii) The cold treatment facility must have contingency plans, approved by the Administrator, for safely destroying or disposing of fruit.

(3) Airports of Atlanta, GA, and Seattle, WA. Consignments of fruit arriving at the airports of Atlanta, GA, and Seattle, WA, for cold treatment, in addition to meeting all other applicable requirements of this section, must meet the following special conditions:

(i) Bulk and containerized consignments of fruit must arrive in fruit fly-proof packaging that prevents the escape of adult, larval, or pupal fruit flies.

(ii) Bulk and containerized consignments of fruit arriving for cold treatment must be cold treated within the area over which the U.S. Department of Homeland Security is assigned the authority to accept entries of merchandise, to collect duties, and to enforce the various provisions of the customs and navigation laws in force.

(iii) The cold treatment facility and APHIS must agree in advance on the route by which consignments are allowed to move between the aircraft on which they arrived at the airport and the cold treatment facility. The movement of consignments from aircraft to a cold treatment facility will not be allowed until an acceptable route has been agreed upon.

(iv) Advance reservations for cold treatment space must be made prior to the departure of a consignment from its port of origin.

(v) The cold treatment facility must remain locked during non-working hours.

(vi) Black light or sticky paper must be used within the cold treatment facility, and other trapping methods, including APHIS-approved fruit fly traps, must be used within the 4 square miles surrounding the cold treatment facility.

(vii) The cold treatment facility must have contingency plans, approved by the Administrator, for safely destroying or disposing of fruit.

(4) Maritime ports of Gulfport, MS, and Corpus Christi, TX. Consignments of...
fruit arriving at the ports of Gulfport, MS, and Corpus Christi, TX, for cold treatment, in addition to meeting all other applicable requirements of this section, must meet the following special conditions:

(i) All fruit entering the port for cold treatment must move in maritime containers. No bulk consignments (those consignments which are stowed and unloaded by the case or bin) are permitted.

(ii) Within the container, the fruit intended for cold treatment must be enclosed in fruit fly-proof packaging that prevents the escape of adult, larval, or pupal fruit flies.

(iii) All consignments of fruit arriving at the port for cold treatment must be cold treated within the area over which the U.S. Department of Homeland Security is assigned the authority to accept entries of merchandise, to collect duties, and to enforce the various provisions of the customs and navigation laws in force.

(iv) The cold treatment facility and APHIS must agree in advance on the route by which consignments are allowed to move between the vessel on which they arrived at the port and the cold treatment facility. The movement of consignments from vessel to cold treatment facility will not be allowed until an acceptable route has been agreed upon.

(v) Advance reservations for cold treatment space at the port must be made prior to the departure of a consignment from its port of origin.

(vi) Devanning, the unloading of fruit from containers into the cold treatment facility, must adhere to the following requirements:

(A) All containers must be unloaded within the cold treatment facility; and

(B) Untreated fruit may not be exposed to the outdoors under any circumstances.

(vii) The cold treatment facility must remain locked during non-working hours.

(viii) Black lights or sticky paper must be used within the cold treatment facility, and other trapping methods, including APHIS-approved fruit fly traps, must be used within the 4 square miles surrounding the cold treatment facility at the maritime port of Gulfport, MS, and within the 5 square miles surrounding the cold treatment facility at the maritime port of Corpus Christi, TX.

(ix) During cold treatment, a backup system must be available to cold treat the consignments of fruit should the primary system malfunction. The facility must also have one or more reefer (cold holding rooms) and methods of identifying lots of treated and untreated fruits.

(x) The cold treatment facility must have the ability to conduct methyl bromide fumigations on site.

(xi) The cold treatment facility must have contingency plans, approved by the Administrator, for safely destroying or disposing of fruit.

(5) Airport of Mascoutah, IL. Consignments of fruits or vegetables arriving at the MidAmerica St. Louis Airport, Mascoutah, IL, for cold treatment, in addition to meeting all other applicable requirements of this section, must meet the following special conditions:

(i) Bulk and containerized consignments of fruits or vegetables arriving for cold treatment must be cold treated within the area over which the U.S. Department of Homeland Security is assigned the authority to accept entries of merchandise, to collect duties, and to enforce the various provisions of the customs and navigation laws in force.

(ii) APHIS will evaluate facility safeguards in light of the plant health risks involved and approve the operation of a facility in that location subject to the following conditions to be agreed upon by the involved parties and included in the compliance agreement required in §305.6(f):

(A) The facility will only be certified if the Administrator determines that the regulated articles could be safely transported to the facility from the point of entry or origin without significant risk that plant pests will escape in transit to the facility or while the regulated articles are at the facility.

(B) Bulk consignments (those consignments which are stowed and unloaded by the case or bin) of fruit must arrive in pest-proof packaging that prevents the escape of the pests of concern.

(C) The facility must ensure that the pest-proof cartons are off-loaded from...
containers in a safeguarded environment and at no time are the articles to be removed from the cartons prior to treatment.

(D) Arrangements for treatment must be made before the departure of a consignment from its port of entry or points of origin in the United States. The cold treatment facility and APHIS must agree in advance on the route by which consignments are allowed to move between the aircraft on which they arrived at the airport and the cold treatment facility. The movement of consignments from aircraft to a cold treatment facility will not be allowed until an acceptable route has been agreed upon.

(E) The facility must have contingency plans, approved by the Administrator, for safely destroying or disposing of fruits or vegetables.

(F) The facility must maintain physical separation of treated articles from untreated articles and apply all required safeguards (e.g., larger consignments are broken up into smaller boxes following treatment and those treated articles are required to be packaged in pest-proof containers per an agreement between the treatment facility and the importer) before releasing to local markets or for movement to other States.

§ 305.7 Quick freeze treatment requirements.

Quick freeze treatment for fruits and vegetables imported into the United States or moved interstate from Hawaii or Puerto Rico must be conducted in accordance with §§319.56-12 or 318.13-13, respectively, of this chapter. The PPQ Treatment Manual indicates fruits and vegetables for which quick freeze is an authorized treatment. Requests to authorize quick freeze as a treatment for other fruits and vegetables may be made in accordance with §305.2(c).

§ 305.8 Heat treatment requirements.

(a) Certified facility. The treatment facility must be certified by APHIS. Re-certification is required annually, or as often as APHIS directs, depending upon treatments performed, commodities handled, and operations conducted at the facility. In order to be certified, a heat treatment facility must:

(1) Have equipment that is capable of adequately circulating air or water (as relevant to the treatment), changing the temperature, and maintaining the changed temperature sufficient to meet the treatment schedule parameters in the PPQ Treatment Manual or in another treatment schedule approved in accordance with §305.2.

(2) Have equipment used to record, monitor, or sense temperature, maintained in proper working order.

(3) Keep treated and untreated fruits, vegetables, or articles separate so as to prevent reinfestation and spread of pests.

(b) Monitoring. Treatment must be monitored by an official authorized by APHIS to ensure proper administration of the treatment. An official authorized by APHIS approves, adjusts, or rejects the treatment.

(c) Compliance agreements. Facilities located in the United States must operate under a compliance agreement with APHIS. The compliance agreement must contain requirements for equipment, temperature, water quality, circulation, and other measures for performing heat treatments to ensure that treatments are administered properly. Compliance agreements must allow officials of APHIS to inspect the facility to monitor compliance with the regulations.

(d) Workplans. Facilities located outside the United States must operate in accordance with a workplan. The workplan must be signed by a representative of the national plant protection organization of the country of origin (NPPO), and APHIS. The workplan must contain requirements for equipment, temperature, water quality, circulation, and other measures to ensure that heat treatments are administered properly. Workplans for facilities outside the United States must include