- (b) Area Under Quarantine. [Reserved]
 - An area shall be designated as under quarantine when survey results indicate an infestation is present, the Department has defined the infested area, and the local California County Agricultural Commissioner(s) is notified and requests the quarantine area be established. The Department shall also provide electronic and/or written notification of the area designation(s) to other California County Agricultural Commissioners and other interested or affected parties and post the area description to its website at:

 www.cdfa.ca.gov/plant/mexfly/regulation.html. An interested party may also go to the above website and elect to receive automatic notifications of any changes in quarantine areas through the list serve option.
 - (2) If an area is not undergoing the sterile insect technique, an infestation is present when eggs, a larva, a pupa, a mated female or five or more male or unmated female Mexican fruit fly adults are detected within three miles of each other and within one life cycle. In an area undergoing sterile insect technique the criteria for an infestation are the same except a single mated female does not constitute an infestation but counts towards an adult for five or more.
 - The initial area under quarantine shall be a minimum of a 4.5 mile radius surrounding the qualifying detections being used as an epicenter.

 Commercial host properties shall not be split by the quarantine boundary line and the boundary line shall be expanded beyond the 4.5 miles as necessary to encompass such host material in its entirety. Wherever possible, known accepted mapping features, including but not limited to roads, streets, highways, creeks, streams, rivers, canals, city, county, State, park and forest boundary lines are used first and if there are no acceptable features such as these then imaginary lines with or without latitude and longitude points may be used.
 - (4) Satellite infestations: a detection of a single life stage of Mexican fruit fly within any established quarantine area may be considered a satellite infestation and may be used as the epicenter using an additional 4.5 mile radius surrounding the detection to expand the quarantine area.

- (5) Any interested party or local entity may appeal an area designation by submission to the Department of a written request for review of the designation accompanied by clear and convincing evidence justifying a change in the designation. The appeal must be filed no later than ten (10) working days following receipt of the notice of designation. The Department must respond with a written decision no later than ten (10) working days following receipt of the appeal. During the pending of the appeal, the designation under appeal shall remain in effect.
- (6) The infested area designation shall be removed if no additional life stages are detected by trapping or visual surveys for three life cycles after the last detection within the quarantine area.
- A life cycle is an estimate of insect phenology based on a heat degree day temperature driven model. Base developmental temperature thresholds are used in this model's calculations and it estimates the generation time period necessary for the completion of a generation of Mexican fruit fly. Daily minimum and maximum temperatures are used to produce a sine curve over a 24-hour period. The degree days for that day are estimated by calculating the area above the threshold and below the curve, assuming that the temperature curve is symmetrical around the maximum temperature. For Mexican fruit fly the Department uses the lifecycle model with 48.92 "Fahrenheit base developmental temperature and 1357 degree days Fahrenheit per generation.

Note: Authority: Sections 407, 5301, 5302, and 5322, Food and Agricultural Code.

Reference: Sections 5301, 5302, and 5322, Food and Agricultural Code.