CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE
PROPOSED CHANGES IN THE REGULATIONS

Title 3, California Code of Regulations
Section 3417
Mexican Fruit Fly Interior Quarantine
and 3588 Mexican Fruit Fly Eradication Area

INITIAL STATEMENT OF REASONS/
POLICY STATEMENT OVERVIEW

Description of the Public Problem, Administrative Requirement, or Other Condition or Circumstance the Regulation is Intended to Address
These regulations are intended to address the obligation of the Secretary of Food and Agriculture to protect the agricultural industry of California from the movement and spread within California of injurious plant pests as required by Food and Agricultural Code (FAC) Sections 401 and 403.

Purpose
The specific purpose of amending California Code of Regulations (CCR) Sections 3417 Mexican Fruit Fly Interior Quarantine and 3588 Mexican Fruit Fly Eradication Area is to revise and update the known host list for Mexican fruit fly in California regulation to coincide with the official Mexican fruit fly (*Anastrepha ludens*) host list promulgated on July 14th, 2021 by the United Stated Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS). By having the CCR host list paired with the USDA host list, the Department will be able to enact any quarantine needed against the Mexican fruit fly using the federal standards.

California’s requirements for the Mexican fruit fly must parallel the USDA requirements or the entire state will be quarantined if a fly is detected. Therefore, the Mexican fruit fly
eradication area or any future Mexican fruit fly quarantine must regulate hosts on the revised USDA host list.

**Factual Basis**

The factual basis for the determination by the Department that the amendment of Sections 3417(c) and 3588(b) is necessary is as follows:

Mexican fruit fly is a destructive insect pest which attacks the fruit of various plants including crops such as citrus, apples, avocados, and pears.

The female punctures host fruit to lay eggs, which develop into larvae. The punctures admit decay organisms that may cause tissue breakdown. Larval feeding causes breakdown of fruit tissue. Larvae also shed their skins twice while inside the fruit. Fruits with egg punctures and larval feeding are generally unfit for human consumption. Larvae drop from fruit when mature and pupate in the soil. Populations of Mexican fruit fly currently are found in extreme south Texas along the lower Rio Grande Valley, with eradication attempts both there and in the bordering areas of Mexico. In California the first eradication occurred in 1954 in San Diego County. If Mexican fruit fly were allowed to become established it would threaten the production, sale and export of many fruit crops in California. The paper Economic Implications of the Mexican Fruit Fly Infestation in Texas (2022) estimates that even with Texas’ current quarantined areas and pest management strategies, the Texas citrus industry could experience an annual economic loss of $5.79 million due to the Mexican fruit fly.

**Project Description**

This amendment will provide authority for the State to minimize the chance of Mexican fruit fly being moved beyond the quarantine zone if a quarantine zone is implemented.

In Section 3588(b)(1) Mexican Fruit Fly Eradication Area, changes were made to the host list to harmonize the list with the USDA host list. The previous host list was a mix of English and
Latin names and did not include the all the species listed in CCR Section 3417. The list below included all species currently part of the USDA host list, including correct spelling and English and Latin names.

<table>
<thead>
<tr>
<th>Latin Name</th>
<th>English Name</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Anacardium occidentale</em> L.</td>
<td>Cashew nut</td>
</tr>
<tr>
<td><em>Annona cherimola</em> Mill.</td>
<td>Cherimoya, custard-apple</td>
</tr>
<tr>
<td><em>Annona cherimola</em> Mill. × <em>Annona reticulata</em> L.</td>
<td>Atemoya</td>
</tr>
<tr>
<td><em>Annona liebmanniana</em> Baill.</td>
<td>Hardshell custard-apple</td>
</tr>
<tr>
<td><em>Annona reticulata</em> L.</td>
<td>Custard-apple</td>
</tr>
<tr>
<td><em>Annona squamosa</em> L.</td>
<td>Sugar apple</td>
</tr>
<tr>
<td><em>Carica papaya</em> L.</td>
<td>Papaya</td>
</tr>
<tr>
<td><em>Casimiroa edulis</em> La Llave &amp; Lex.</td>
<td>Mexican-apple, white sapote</td>
</tr>
<tr>
<td><em>Casimiroa greggii</em> (S. Watson) F. Chiang</td>
<td>Yellow chapote</td>
</tr>
<tr>
<td><em>Casimiroa sapota</em> Oerst.</td>
<td>Matasano</td>
</tr>
<tr>
<td><em>Citrus</em> spp.</td>
<td>Orangequat, procimequat</td>
</tr>
<tr>
<td><em>Citrus ×aurantifolia</em> (Christm.) Swingle</td>
<td>Lime, Key lime, Mexican lime, sour lime, lima</td>
</tr>
<tr>
<td><em>Citrus ×aurantium</em> L.</td>
<td>Bitter orange, clementine, sour orange, tangelo</td>
</tr>
<tr>
<td><em>Citrus ×aurantium</em> L. var. <em>sinensis</em> L.</td>
<td>Blood orange, common orange, naval orange, sweet orange, orange, Valencia orange</td>
</tr>
<tr>
<td><em>Citrus deliciosa</em> Ten.</td>
<td>Mandarina, Italian tangerine</td>
</tr>
<tr>
<td><em>Citrus limon</em> (L.) Osbeck</td>
<td>Dwarf lemon, Canton lemon, Chinese dwarf lemon, Sweet lemon or lime, Red lemon, Meyer lemon</td>
</tr>
<tr>
<td><em>Citrus medica</em> L.</td>
<td>Buddha’s-Hand, citron, finger citron</td>
</tr>
<tr>
<td><em>Citrus nobilis</em> Lour.</td>
<td>King orange, Mandarina, tangor</td>
</tr>
<tr>
<td><em>Citrus ×paradisi</em> Macfad.</td>
<td>Grapefruit, pomelo, toronja</td>
</tr>
<tr>
<td><em>Citrus reshni</em> hort. ex Tan</td>
<td>Cleopatra mandarin, mandarina, spice mandarin</td>
</tr>
<tr>
<td><em>Citrus reticulata</em> Blanco</td>
<td>Mandarin, Swatow orange, tangerine</td>
</tr>
<tr>
<td><em>Citrus unshiu</em> Marcow</td>
<td>Mandarin, Satsuma orange</td>
</tr>
<tr>
<td><em>Coffea arabica</em> L.</td>
<td>Coffee, Arabian coffee</td>
</tr>
<tr>
<td><em>Cydonia oblonga</em> Mill.</td>
<td>Quince, membrillo</td>
</tr>
<tr>
<td><em>Diospyros kaki</em> Thunb.</td>
<td>Oriental persimmon, Caqui, kaki</td>
</tr>
<tr>
<td><em>Inga jinicuil</em> Schltldl. &amp; Cham. ex G. Don</td>
<td>Ice cream bean, Algodoncillo, Chalahuite</td>
</tr>
<tr>
<td><em>Inga micheliana</em> Harms</td>
<td>Chalum</td>
</tr>
<tr>
<td><em>Malus domestica</em> (Suckow) Borkh.</td>
<td>Apple, Manzana</td>
</tr>
<tr>
<td><em>Malus pumila</em> Mill.</td>
<td>Paradise apple</td>
</tr>
</tbody>
</table>
In Section 3417(c)(1) Mexican Fruit Fly Interior Quarantine, the host list has been removed and a reference to Section 3588(b)(1) has been added. The Section (c)(1) host list has multiple species for which the spelling is no longer correct or that are no longer consistent with the USDA host list. By referencing the list in Section 3588(b)(1), these two regulations can be harmonized and be more easily updated.

In Section 3417(c)(2), a reference to the list in Section 3417(c)(1) has been removed since the list has been removed. A reference to that same host list in Section 3588(b)(1) has been added as it will help the two regulations stay in harmony with each other.

Current Laws & Regulations

Existing law, FAC Section 407, provides that the Secretary may adopt such regulations as are reasonably necessary to carry out the provisions of this code that the Secretary is directed or authorized to administer or enforce.
Existing law, FAC Section 5301, provides that the Secretary may establish, maintain, and enforce such quarantine regulations as they deem necessary to protect the agricultural industry of this state from pests. The regulations may establish a quarantine at the boundaries of this state or elsewhere within the state.

Existing law, FAC Section 5301, provides that the Secretary may make and enforce such regulations as they deem necessary to prevent any plant or thing which is, or is liable to be, infested or infected by, or which might act as a carrier of, any pest, from passing over any quarantine line which is established and proclaimed pursuant to this division.

Existing law, FAC Section 5322, provides that the Secretary may establish, maintain, and enforce quarantine, eradication, and such other regulations as are in their opinion necessary to circumscribe and exterminate or prevent the spread of any pest that is described in FAC Section 5321.

Existing law, FAC Section 5761, provides that the Secretary may proclaim any portion of the state to be an eradication area with respect to the pest, prescribe the boundaries of such area, and name the pest and the hosts of the pest which are known to exist within the area, together with the means or methods which are to be used in the eradication or control of such pest.

Existing law, FAC Section 5762, provides that the Secretary may proclaim any pest with respect to which an eradication area has been proclaimed, and any stages of the pest, its hosts and carriers, and any premises, plants, and things infested or infected or exposed to infestation or infection with such pest or its hosts or carriers, within such area, are public nuisances, which are subject to all laws and remedies which relate to the prevention and abatement of public nuisances.

Existing law, FAC Section 5763, provides that the Secretary, or the commissioner acting under the supervision and direction of the director, in a summary manner, may disinfect or
take such other action, including removal or destruction, with reference to any such public
nuisance, which he thinks is necessary.

Existing law, FAC Section 5764, provides that if an eradication area has been proclaimed
with respect to a species of fruit flies and the removal of host plants of such species is
involved, the director may enter into an agreement with the owner of such host plants to
remove and replace them with suitable nursery stock in lieu of treatment.

The existing law obligates the Secretary to investigate and determine the feasibility of
controlling or eradicating pests of limited distribution but establishes discretion with regard
to the establishment and maintenance of regulations to achieve this goal. This amendment
provides the necessary regulatory authority to prevent the artificial spread of a serious insect
pest, which is a mandated statutory goal.

FAC Section 401.5 states, “the department shall seek to protect the general welfare and
economy of the state and seek to maintain the economic well-being of agriculturally
dependent rural communities in this state.” On July 14th, 2021 the United States Department
of Agriculture released a revised, more extensive host list for the Mexican fruit fly. If the fly
were allowed to spread and become established in host fruit production areas, California’s
agricultural industry would suffer losses due to decreased production of marketable fruit,
increased pesticide use, and loss of markets if other states or countries enacted quarantines
against California products. Therefore, it is necessary to amend Sections 3417(c) and
3588(b) for Mexican fruit fly to reflect the changes and additions in the potential host list.

**Evaluation of Inconsistency/Incompatibility with Existing State Regulations**
The Department is the only agency that can implement plant quarantine and eradication
areas, which the host lists are part of. As required by Gov. Code Section 11346.5(a)(3)(D),
the Department has conducted an evaluation of these regulations and has determined that
it is not inconsistent or incompatible with existing state regulations.
Anticipated Benefits from This Regulatory Action

The implementation of these regulations will help prevent potential:

- direct damage to the agricultural industry growing host fruits
- indirect damage to the agricultural industry growing host fruits due to the implementation of quarantines by other countries and loss of export markets
- increased production costs to the affected agricultural industries
- increased pesticide use by the affected agricultural industries
- increased costs to the consumers of host fruits
- increased pesticide use by homeowners and others
- the need to implement a State interior quarantine
- the need to implement a federal domestic quarantine

California Environmental Quality Act

Prior to conducting any action authorized by this regulation, the Department will conduct an environmental analysis pursuant to the California Environmental Quality Act of 1970 (Public Resources Code Section 21000 et. seq. as amended) and the State CEQA Guidelines (Title 14 California Code of Regulations Section 15000 et. seq.).

Mandate on Local Agencies or School Districts

The Department of Food and Agriculture has determined that these regulations do not impose a mandate on local agencies or school districts.

Economic Impact Analysis (Government Code 11346.3(b))

The prevention of the spread of Mexican fruit fly in California through regulation of host material via the amendment and implementation of this regulation prevent economic harm to:

- the general public
• homeowners and community gardens
• agricultural industry
• the State's general fund.

By neglecting to regulate the types of host fruit, this insect pest could spread into the local environment via the surrounding non-agricultural ecosystems. This could adversely impact private and commercial landscape plantings, local, regional, state and national parks, other recreational sites, open habitats, and wild lands. Affected plants could become less vigorous and may produce fewer seeds. Plants/trees with low propagule output can result in major changes to plant community structure. An established Mexican fruit fly population would likely result in increased insecticide usage in the areas affected, with potential negative impacts on non-target insects, along with the species that rely on them. Therefore, modifying the host list to reflect the current USDA host list will have no environmental impact or (in the case of a quarantine being triggered) a potential positive environmental impact.

The Creation or Elimination of Jobs within the State
The amendment is designed to minimize the spread of Mexican fruit fly in California through regulation of host material. Detection activities are currently being performed by existing state staff throughout the State. Therefore, the Department has determined that this regulatory proposal will not have a significant impact on the creation or elimination of jobs in the State of California.

The Creation or Elimination of Businesses in California
The amendment is designed to minimize the spread of Mexican fruit fly in California through regulation of host material. Detection activities are currently being performed by existing state staff throughout the State. Therefore, the Department has determined that this regulatory proposal will not have a significant impact on the creation of new businesses in the State of California.

The Expansion of Businesses in California
The amendment is designed to minimize the spread of Mexican fruit fly in California through regulation of host material. Compliance activities are currently being performed by existing state staff throughout quarantine areas within the State. Therefore, the Department has determined that this regulatory proposal will not have a significant impact on the expansion of businesses currently doing business in the State of California.

Worker Safety
The amendment of this regulation is not expected to have an effect on worker safety.

Estimated Cost or Savings to Public Agencies or Affected Private Individuals or Entities
The Department of Food and Agriculture has determined that Section 3417(c)(2), and Section 3588(b)(1) does not impose a mandate on local agencies or school districts. All eradication activities shall be conducted by the Department. Therefore, no reimbursement is required under Section 17561 of the Government Code.

The Department also has determined that no reimbursable costs or savings under Part 7 (commencing with Section 17500) of Division 4 of the Government Code to local agencies or school districts and no nondiscretionary costs or savings to local agencies or school districts, will result from the amendment of subsection 3591.29.

There are no reimbursable costs or savings under Part 7 (commencing with section 17500) of Division 4 of the Government Code to local agencies or school districts and no nondiscretionary costs or savings to local agencies or school districts anticipated from the adoption of this amendment.

The Department has determined that the proposed actions will not have a significant adverse economic impact on housing costs or California business, including the ability of California businesses to compete with businesses in other states.

Potential Impact to Homeowners and Community Gardens
Currently, there is no quarantine of Mexican fruit fly in California, so modifying the host list would result in no impacts to the general public. By having a host list that is maintained with the most current information the Department has a higher likelihood of keeping the pest out of California.

Potential Impacts to General Fund and Welfare
The proposed regulations do not have immediate or definitive impact to the general fund or general welfare. They will make is more likely that Mexican fruit fly would be detected before an infestation can happen, and if there is an infestation react quickly and effectively. Speed of response is key to eradicating an incipient pest infestation. Programmatic delays potentially can lead to pest quarantines, as well as increased production costs and potential job loss. The agricultural industry is one of the economic engines in the State. Negative impacts to agriculture impact the State’s economic recovery and the general welfare of the State. Additionally, any further job losses in this area would likely be felt by low-skilled workers whose employment options are already limited. The loss of any additional agricultural jobs would likely result in an increase in the State’s public assistance obligations which would also negatively impact the State’s economic recovery.

Assessment
These conclusions are based upon the same analysis related to the adverse economic impact on business above. Further we don’t expect these actions to create jobs or businesses.

The Department has made an assessment that the amendment to these regulations would not (1) create or eliminate jobs within California, (2) create new business or eliminate existing businesses within California, nor (3) affect the expansion of businesses currently doing business within California.

Alternatives Considered
The Department of Food and Agriculture must determine that no alternative would be more
effective in carrying out the purpose for which the action is proposed or would be as effective as well as less burdensome to affected private persons than the proposed actions.

The Department considered taking no action. If no action is taken the host lists in Sections 3417 Mexican Fruit Fly Interior Quarantine and 3588 Mexican Fruit Fly Eradication Area will no longer be consistent with the July 2021 USDA list. This could lead to the Department not correctly applying any quarantines to all potential host material. This would potentially result in further quarantines throughout the State with the concomitant economic and operational impacts on host commodity producers, venders, and home growers.

**Information Relied Upon**

The Department is relying upon the following studies, reports, and documents in the amendment of Sections 3417(c) and 3588(b):

- Animal and Plant Health Inspection Service (APHIS), *Anastrepha ludens*, Mexican Fruit Fly Host List, July 2021; Excerpted from Federal Order DA-2021-17, July 14, 2021

- California Department of Food and Agriculture, Action Plan for Mexican Fruit Fly, Revised April 2004

- California Department of Food and Agriculture, Mexican Fruit Fly Fact Sheet, October 23, 2008