Description of the Public Problem, Administrative Requirement, or Other Condition or Circumstance the Regulations are Intended to Address

This regulation is intended to address the obligation of the Department of Food and Agriculture to protect the agricultural industry from the movement and spread of injurious plant pests within California.

Huanglongbing (HLB), also referred to as citrus greening, is a plant disease associated with several species of the genus *Candidatus Liberibacter*, a phloem-limited, uncultured bacterium. HLB is also referred to as “yellow dragon disease” and “yellow shoot disease.” The spread of the HLB-associated bacterium is primarily via insect vectors, specifically the Asian citrus psyllid (*Diaphorina citri*) (ACP) and the African citrus psyllid (*Trioza erytreae*). Once a psyllid acquires the bacterium from an infected host plant, the psyllid retains the bacterium for life. Once infected, there is no cure for HLB-infected citrus trees, which decline and die within a few years. Additionally, the fruit produced by infected trees is not suitable for either the fresh market or juice processing due to the significant increase in acidity and bitter taste. For these reasons, HLB is considered the most devastating of all citrus diseases and is even listed as a “select agent” under federal regulation. The ACP is of great concern to California citrus growers because it is established in Florida, Louisiana, Texas, Hawaii, and Mexico and poses an immediate threat of introduction from these areas. It also occurs elsewhere, such as Brazil, China, Cuba, and the Caribbean. The African citrus psyllid is found in eastern Africa, Saudi Arabia, Yemen, and occasionally in the Canary Islands and Madeira.
On September 16, 2005, the Animal and Plant Health Service (APHIS) of the United States Department of Agriculture (USDA) issued an initial Federal Order to impose restrictions on the interstate movement of ACP, ACP-host material and HLB-host material from quarantined areas in Florida in order to prevent the artificial spread of HLB and ACP. APHIS has subsequently issued numerous Federal Orders, most recently on April 19, 2017, as a result of an additional HLB detection in Louisiana. Under this latest Federal Order, 1) the entirety of Florida, Georgia, Puerto Rico, and the United States Virgin Islands are regulated for HLB, 2) portions of California, Louisiana, South Carolina, and Texas are regulated for HLB, 3) the entirety of Alabama, Arizona, Florida, Georgia, Hawaii, Louisiana, Mississippi, Texas, American Samoa, Guam, the United States Virgin Islands, the Northern Mariana Islands, and Puerto Rico are quarantined for ACP, and 4) portions of South Carolina and California are quarantined for ACP.

The Federal Order prohibits the interstate movement of host nursery stock from an ACP regulated area to any other citrus-producing state. Additionally, all host fruit must be cleaned, washed, and packed at a packing facility located within the regulated area prior to becoming eligible for interstate shipment. The USDA cannot regulate less than an entire state unless the affected state adopts its own regulations for intrastate movement that are substantially the same as the federal regulation.

In California, ACP was first detected during August 2008, in San Diego County. Resulting from the number of ACPs detected in 2008, the Department adopted an emergency regulation, California Code of Regulations (CCR) Section 3435, Asian Citrus Psyllid State Interior Quarantine, which became effective on September 5, 2008. The effect of this regulation was to implement the State's authority to perform quarantine activities against ACP in regulated areas and also to establish hosts, possible carriers, regulated areas, restrictions, and exemptions. Any quarantine actions undertaken by the Department are in cooperation and coordination with the USDA and the local County Agricultural Commissioner(s).
Within one year of the initial detection in San Diego, ACP was also found in Imperial, Orange, and Los Angeles counties. There are currently 10 entire counties under quarantine and portions of 20 other counties under quarantine. There are now large contiguous areas under quarantine, including all southern California counties. In the main citrus production areas of the southern San Joaquin Valley, there is a large contiguous area under quarantine from Madera to Kern County. There are also 21 smaller, non-contiguous quarantine areas in central and northern California.

In order to prevent the artificial spread of ACP out of quarantine areas, bulk citrus shipments must be tarped or transported in a fully enclosed container when moving within or out of a quarantine area. Host nursery stock must be treated with pesticides and affixed with a tag warning against moving the plant out of the quarantine area, but the stock may move anywhere within the quarantine area after purchase. All other regulated articles may move within the quarantine areas without restriction.

During 2012, HLB was detected in California, and now portions of Los Angeles, Orange, Riverside, and San Bernardino counties are under quarantine for HLB. HLB detections, including the detection of HLB-infected ACPs, have increased significantly in some of these areas over the past twelve months. HLB can remain at sub-detectable levels in trees for up to five years. Consequently, the level of risk for the artificial movement of HLB within the large contiguous quarantine areas in southern California and between non-contiguous quarantine areas in other parts of the state is higher now than it was in 2008, when ACP was originally detected, due to the uncertain distribution of HLB within the state.

The current ACP quarantine regulation does not adequately address the heightened risk of artificial movement, and the HLB quarantine only applies where HLB is known to occur. Due to the current status of ACP and HLB in California, the Department is proposing to amend CCR Section 3435 to restrict movement of ACP host nursery stock between three regional quarantine zones and bulk citrus between seven regional
quarantine zones. This will make CCR Section 3435 a more effective, efficient, and responsive regulation.

**Scientific Purpose and Factual Basis**

Under Food and Agricultural Code (FAC) Sections 403, 407, 5301, 5302, and 5322, the Department is authorized to adopt regulations necessary to prevent the spread of injurious insect pests and animal diseases. The specific purpose of CCR Section 3435 is to provide authority to the State to regulate the movement of ACP-host nursery stock, bulk citrus, and other possible carriers of ACP within and between regional quarantine zones in order to prevent the artificial spread of ACP to uninfested areas and between regional quarantine zones. The aim of this preventive measure is to protect California's agricultural industry.

FAC Section 5821 provides that the Secretary, for the purpose of promoting and protecting the agricultural industry of the state, may, upon request, inspect plants and the premises upon or near which they are growing, and the records of their sources and qualities. The Secretary may, upon the basis of information thus determined, maintain registries of plants that are found not to be infested or infected with pests, and registries of plants that are liable to become infested or infected. (FAC Section 5821). Existing law also provides that the Secretary may establish and enforce regulations that are necessary to carry out the purposes of the registries' provisions. (FAC Section 5823).

The scientific basis for the proposed amendment is to prevent the artificial spread of ACP via host nursery stock and bulk citrus by restricting movement within and from separate regional quarantine zones based on specific pest risk criteria. The factual basis for the Department’s determination that the amendment of CCR Section 3435 is necessary includes the following facts:

From 2015 and running through 2017, the Department and the California Citrus Pest and Disease Prevention Committee (CCPDPC) began a series of meetings and discussions regarding revision of regulations governing movement of ACP host
materials. Among issues discussed were the differential risks between host nursery stock and bulk citrus for the artificial movement of ACP. Host nursery stock has a much higher likelihood of starting a new infestation if it is transported out of a quarantine area while infested with ACP because all life stages that may be present on the plant can continue to feed and survive on the living plant. Whereas the likelihood of ACP infested host nursery stock being transported out of a quarantine area is lower than that of ACP infested bulk citrus being transported out of a quarantine area, the likelihood of establishing a new infestation is greater due to the fact that ACP can complete its life cycle on living nursery stock. ACP eggs and nymphs transported on bulk citrus cannot complete their lifecycle on the dead leaves and stems incidentally moved with bulk citrus fruit and must first find a suitable host plant upon which to complete their life cycle and establish a new infestation. Bulk citrus is generally transported to a cleaning and processing facility where it is subjected to processes that mitigate ACP infestation for all life stages. The number of shipments of bulk citrus within and between ACP quarantine areas is far greater than the number of shipments of host nursery stock. Due to these differential risks posed by different commodities, the CCPDPC made a motion for ACP-host nursery stock and bulk citrus to be regulated independently of one another within separate regional quarantine zones. Based on the meetings and discussions from 2015 through 2017, the Department decided to revise the regulations and initiate rulemaking.

**CCR Section 3435, Asian Citrus Psyllid**

The Department is proposing to amend the current CCR Section 3435, “Asian Citrus Psyllid Quarantine,” which currently regulates all ACP-host material under a single set of quarantine restrictions and boundaries. Under the proposed CCR Section 3435, the movement of ACP-host nursery stock and bulk citrus would be regulated independently of one another within and between separate regional quarantine zones. The regional quarantine zones would be established based on specific pest risk criteria.

The Department concluded that a more effective, efficient, and responsive approach is necessary because of the differential risks between host nursery stock and bulk citrus, the recent increase of HLB detections and HLB-infected ACP, and the uncertain
distribution of HLB throughout the state. The purpose of this proposed amendment is to accomplish this goal in a transparent manner, which can be easily understood by those stakeholders who may be affected by this regulation in the future. This amendment establishes criteria for how a host nursery or bulk citrus regional quarantine zone may be amended or expanded if there are additional detections of ACP, specifies the process for adding counties or portions of counties to a regional quarantine zone, establishes initial regional quarantine zones, and establishes an appeal process and a list serve option for obtaining information regarding ACP regulation. The list serve will function as a form of active communication to provide current and immediate updates to regional quarantine zones to those stakeholders impacted by the regulation. Any interested party may choose to subscribe to the list serve to receive such updates.

**CCR Section 3435 Subsection (b) 1**

This subsection establishes that host nursery regional quarantine zones and bulk citrus regional quarantine zones will be designated to restrict movement of ACP host material. As a result of Department and citrus industry experience with the continuous expansion of ACP-quarantine areas throughout the state and the increase in HLB detections in some areas, there is general agreement that a regional quarantine approach is needed. The movement of host nursery stock and bulk citrus present different potential risks for spreading ACP and should be regulated independently of one another. Separate regional quarantine frameworks for host nursery stock and bulk citrus will allow the Department to effectively manage the risk of spreading ACP through the movement of different types of host material. When the pest risk factors described in CCR Section 3435 Subsection (b)(3) are used to evaluate counties, or portions of counties, the counties will be aggregated into three regional quarantine zones for host nursery stock and seven regional quarantine zones for bulk citrus based on the following criteria:

**Host Nursery Stock Regional Quarantine Zones**

Zone 1 comprises uninfested counties, geographical barriers exist between it and Zone 3, and it is not proximate to the border with Mexico.
Zone 2 comprises counties that are partially infested with ACP, geographical barriers exist between it and Zone 3, HLB has not been detected, and the zone is not proximate to the border with Mexico.

Zone 3 comprises counties that are generally infested with ACP, HLB has been detected in some areas, and the zone is proximate to the border with Mexico.

**Bulk Citrus Regional Quarantine Zones**

Zone 1 comprises uninfested counties where HLB has not been detected, there are no contiguous citrus growing regions, and it is not proximate to the border with Mexico.

Zone 2 comprises counties that are partially infested with ACP, HLB has not been detected, a geographical barrier exists between it and adjacent contiguous citrus growing regions (i.e., Zones 4, 5, and 6), a contiguous citrus growing region exists within the zone, sufficient citrus commodity cleaning and packing capacity exists within the zone, and geographical barriers separate it from zones that are heavily infested with ACP and where HLB has been detected (i.e., Zone 6).

Zone 3 comprises counties that are partially infested with ACP, HLB has not been detected, a geographical barrier exists between it and adjacent contiguous citrus growing regions (i.e., Zone 2, 3, and 4), a contiguous citrus growing region exists within the zone, sufficient citrus commodity cleaning and packing capacity exists within the zone, and geographical barriers separate it from zones that are heavily infested with ACP (i.e., Zone 4) or where HLB has been detected (i.e., Zone 6).

Zone 4 comprises counties that are generally infested with ACP, HLB has not been detected, a geographical barrier exists between it and adjacent contiguous citrus growing regions (i.e., Zones 2, 3, and 4), a contiguous citrus growing region exists within the zone, sufficient citrus commodity cleaning and packing capacity exists within
the zone, geographical barriers separate it from Zone 6 where HLB has been detected, and it is not proximate to the border with Mexico.

Zone 5 comprises counties that are generally infested with ACP, HLB has not been detected, a geographical barrier exists between it and adjacent contiguous citrus growing regions (i.e., Zones 4 and 6), a contiguous citrus growing region exists within the zone, sufficient citrus commodity cleaning and packing capacity exists within the zone, a geographical barrier separates it from Zone 6 where HLB has been detected, and it is proximate to the border with Mexico.

Zone 6 comprises counties, or portions of counties, that are generally infested with ACP, HLB has been detected in some areas, a geographical barrier exists between it and adjacent contiguous citrus growing regions (i.e., Zones 2, 4, and 5), a contiguous citrus growing region exists within the zone, sufficient citrus commodity cleaning and packing capacity exists within the zone, and it is not proximate to the border with Mexico.

Zone 7 comprises counties that are partially infested with ACP, HLB has not been detected, there are no contiguous citrus growing regions, and it is not proximate to the border with Mexico.

The original regional quarantine zone maps for host nursery stock and bulk citrus were recommended by the CCPDPC in October, 2016, and may be found on pages 10 and 11, respectively, of this document. Due to additional ACP and HLB detections throughout the state since that time, the Department has included proposed initial regional quarantine zone maps to demonstrate how the regional quarantine zones for host nursery stock and bulk citrus could be formed based on a current evaluation of each county under the pest risk factors described in Section 3435 Subsection (b)(3). The example of the initial regional quarantine zone maps for host nursery stock and bulk citrus may be found on pages 12 and 13, respectively, of this document. An inset map clarifying the potential boundary between bulk citrus regional quarantine Zones 5
and 6 in portions of San Bernardino and Riverside can be found on page 14 of this document. This map further depicts how the Department will utilize the pest risk criteria to establish portions of Riverside and San Bernardino counties in Bulk Citrus Regional Quarantine Zone 6 due the detection of HLB in the City of Riverside.
CCR Section 3435 Subsection (b)(2) establishes that a county or portion thereof shall be included in the appropriate host nursery stock regional quarantine zone and bulk citrus regional quarantine zone when:

1) Survey results indicate an ACP or HLB infestation is present or not. The presence or absence of an ACP or HLB infestation is determined by regularly scheduled detection surveys conducted throughout the state in commercial and residential citrus. This is necessary to ensure that areas where ACP and/or HLB occur, or do not occur, are subject to appropriate restrictions based on the risk of ACP or HLB spreading artificially. Areas where ACP and/or HLB have been detected pose a greater risk for spreading ACP and/or HLB out of the area via host commodities and other possible carriers.

2) The local California County Agricultural Commissioner has been notified and requests the quarantine. This is necessary to comply with the FAC Section 5251, which requires the Department to immediately report the discovery of a pest to the local California County Agricultural Commissioner.

3) Notification of the regional quarantine zone change, including a map of the host nursery stock regional quarantine zones and/or bulk citrus regional quarantine zones, a written description of the boundaries of the regional quarantine zones, the Department’s evaluation of the pest risk factors associated with the county or portion thereof, and instructions on the process to appeal the designation of a county or portion thereof into a regional quarantine zone, is posted to the Department’s website. This is necessary to ensure that entities affected by the change will be provided a visual and written description of the change in a county’s regional quarantine zone status, the reasoning behind the change, and notification that there is a process to appeal the change.

CCR Section 3435 Subsection (b)(2) also establishes that any interested party may receive notification about changes to the regional quarantine zones, including through a list serve subscription. The list serve will function as a form of active communication to provide current and immediate updates on changes in regional quarantine zones. Any
interested party may choose to subscribe to the list serve to receive such updates. This is necessary to ensure that the public and affected entities have several methods of receiving information.

CCR Section 3435 Subsection (b)(2) establishes that any interested party may appeal a regional quarantine zone designation, describes the process to do so, requires the Department to respond in writing within 10 working days following receipt of the appeal, and that the designation of a county or portion of a county into a host nursery stock and bulk citrus regional quarantine zone shall remain in effect during the appeal. There is a need to have continued opportunity for both local and public input. This section provides that opportunity. However, prior to this proposed regulation, the Secretary amended the current regulation as an emergency action. “'Emergency' means a situation that calls for "immediate action to avoid serious harm to the public peace, health, safety, or general welfare." (Government Code Section 11342.545). If a state agency makes a finding that the adoption of a regulation is necessary to address an emergency, the regulation may be adopted as an emergency regulation, per Government Code Section 11346.1(b)(1).

It is necessary to continue to recognize the emergency nature of the proposed regulation's subject matter. Therefore, it is necessary that any appeal of an area designation be held to a high standard and this is achieved through requiring the appeal to contain clear and convincing evidence. Such evidence would be similar to that necessary to overturn or prevent a proposed emergency regulation being approved by the Office of Administrative Law.

CCR Section 3435 Subsection (b)(3) establishes the pest risk factors considered by the Department when including a county or portion thereof in a regional quarantine zone. Establishing criteria for including a county in the appropriate regional quarantine zone is necessary and crucial in preventing the further spread of ACP or HLB to other areas of the state. Establishing criteria also ensures that the reasons for inclusion in or exclusion from a regional quarantine zone is apparent to stakeholders and the public. The pest risk factors for designating a county or portion of a county to a regional quarantine zone includes factors such as presence or absence of ACP and HLB, substantially similar levels of ACP detections, substantially similar levels of HLB detection, the proximity to
the United States and Mexico border, geographical barriers to the natural movement of
ACP, contiguous commercial citrus growing regions, and the existence of sufficient
citrus commodity cleaning and packing capacity. The criteria were established in
consultation with subject matter experts at the University of California, the State Primary
Entomologist, and State Primary Plant Pathologist. The criteria were selected for the
following reasons:

Regions with substantially similar levels of ACP detections pose an equivalent level of
risk for spreading ACP and should be included in the same regional quarantine zone. Areas with high detections of ACP that are proximate to HLB-infested areas of
California pose a greater risk for the artificial spread of HLB–infected ACP because an
HLB-infected ACP does not trigger a HLB quarantine. Therefore, these areas of high
ACP detections that are proximate to HLB-infested areas should be included in the
same regional quarantine zone.

Regions with substantially similar levels of HLB detections pose an equivalent level of
risk for spreading HLB-infected ACP and should be included in the same region.

ACP and HLB detection levels are determined via regularly scheduled surveys
conducted throughout the state in areas where citrus is grown in commercial or
residential settings. Regions where multiple ACP are routinely detected throughout the
area and during every survey period are considered generally infested. Regions where
ACP have been detected, but are not routinely detected throughout the area or during
every survey period, are considered partially infested. Areas where ACP has not been
detected are considered uninfested.

The proximity to the border of the United States and Mexico poses a higher level of risk
for spreading potentially HLB-infected ACP due to the presence of HLB in border areas
of Mexico and the uncertain distribution of HLB in Mexico due to a low levels of HLB
survey activities.
Geographical barriers to the natural movement of ACP reduce the risk of ACP moving naturally between suitable habitats. ACP can fly long distances and may also be carried on the wind. Geographical barriers such as high mountains and large expanses of host-free areas prevent ACP from moving naturally between suitable habitat. The reduced risk of natural movement between regions separated by geographical barriers coupled with restrictions on the movement of regulated articles maximizes the likelihood of preventing HLB-infected ACP from moving between such regions naturally or artificially.

Contiguous citrus growing regions reduce the risk of ACP moving artificially between such regions because the movement of potentially ACP-infested bulk citrus shipments and conveyances used for citrus harvesting activities are self-contained within each contiguous citrus growing region.

The existence of sufficient citrus commodity cleaning and packing resources within contiguous citrus growing regions reduces the risk of artificial movement of ACP between non-contiguous regions due to the contiguous regions’ ability to process the majority of bulk citrus in the same region where it is grown. This minimizes the risk of artificial spread via potentially infested bulk citrus or conveyances moving between non-contiguous citrus growing regions. The determination that sufficient citrus commodity cleaning and packing resources exist in a contiguous citrus growing region is made by the Department in consultation with citrus industry experts knowledgeable in citrus variety, acreage increase or decrease trends, historical production volumes for different regions, and volume capability of cleaning and packing resources in different regions.

CCR Section 3435 Subsection (c)(4) establishes that citrus fruit in bulk containers or bins or any citrus fruit with leaves and stems attached, including associated green waste, is a host and possible carrier of ACP. Green waste associated with bulk citrus, such as stems and leaves removed from bulk citrus during the cleaning process, is a risk for the spread of ACP that may not move within or from a regional quarantine zone unless the pest risk has been adequately mitigated. Bulk citrus is listed in the current
regulation as a host with restricted movement within and from any area under quarantine for ACP. The proposed regulation takes the necessary step of restricting the movement of green waste associated with bulk citrus in order to ensure that the pest risk is adequately mitigated after the fruit has been cleaned, graded, and packed, at which point the fruit is exempt. (Green waste, such as leaves and stems of bulk citrus, is removed at the initial stages of the citrus cleaning, grading, and packing process, and does not undergo adequate pest risk mitigation steps as does the fruit.)

CCR Section 3435 Subsection (c)(5)(A) Establishes a quarantine regulation exemption for defoliated, dormant, bare-rooted host nursery stock. This exemption is written in the current regulation, but has been reordered in Section 3435 Subsection (c)(5)(A). There is no substantive change.

CCR Section 3435 Subsection (c)(5)(B) Establishes a quarantine regulation exemption for defoliated, dormant nursery host stock in containers where all leaf litter and any weeds have been removed. This exemption is written in the current regulation, but has been reordered in Section 3435 Subsection (c)(5)(B). There is no substantive change.

CCR Section 3435 Subsection (c)(5)(C) Establishes a quarantine regulation exemption for host fruit commercially cleaned, graded, and packed within a bulk citrus regional quarantine zone allowing it to move within or from the zone. This exemption is written in the current regulation, but has been reordered in Section 3435 Subsection (c)(5)(C). There is no substantive change.

CCR Section 3435 Subsection (c)(5)(D) Establishes a quarantine regulation exemption for non-commercially cleaned host fruit for personal consumption and under 25 pounds in weight. Such fruit may move within and from a bulk citrus regional quarantine zone if free of all stems and leaves. This exemption is written in the current regulation, but has been reordered in Section 3435 Subsection (c)(5)(D). There is no substantive change.
Section 3435 Subsection (c)(5)(E) establishes a quarantine regulation exemption for green waste associated with bulk citrus fruit covered in Section 3435 Subsection (c)(4). This exemption allows green waste of bulk citrus fruit to move within a bulk citrus regional quarantine zone. Since bulk citrus fruit is prohibited from moving within or from a regional quarantine zone unless moved under the terms of a special permit (CCR 3435 Subsection (d)(2)(A), this exemption is necessary because the pest risk is equivalent within each regional quarantine zone, and green waste of bulk citrus will not pose a risk of spreading the pest within the zone. Movement of green waste from a regional quarantine zone may occur only under the terms of a special permit.

CCR Section 3435 Subsection (d)(1)(A) establishes restrictions that prevent any host nursery stock or other potentially infested article and commodity from moving out of Host Nursery Stock Regional Quarantine Zones 2 or 3 unless moved under the terms of a special permit. This is necessary in order to ensure that host nursery stock moving between host nursery stock regional quarantine zones with differing levels of pest risk are adequately mitigated. Additionally, all host nursery stock offered for sale or distribution must be treated in a Department approved manner and bear a zone-specific label stating it may not be moved outside of the nursery regional quarantine zone. The treatment is necessary to protect exposed host nursery stock from becoming infested with ACP while it is awaiting sale or distribution within a host nursery stock regional quarantine zone. The label will inform consumers of quarantine restrictions and that the plants may not be moved outside of the regional quarantine zone, helping to prevent the artificial spread of ACP on host nursery stock. Quarantine requirements to appropriately treat and label regulated nursery stock is a requirement in the current regulation.

CCR Section 3435 Subsection (d)(1)(B) establishes that articles or commodities originating in Host Nursery Regional Quarantine Zone 1 may be moved directly through and delivered to another host nursery regional quarantine zone without delay and by a direct route in an enclosed vehicle or container or completely enclosed by a covering to prevent exposure to ACP while transiting the zone. This is necessary to allow low risk host nursery stock from the uninfested Host Nursery Regional Quarantine Zone 1 to
move into the other nursery regional quarantine zones without the quarantine requirements of treating and tagging, as Zone 1 is currently not known to be infested with ACP and therefore a low risk for spreading ACP.

CCR Section 3435 Subsection (d)(2)(A) establishes that bulk citrus and associated green waste covered in Section 3435 Subsection (c)(4) are prohibited from moving within or from a bulk citrus regional quarantine zone unless moved under the terms of a special permit. This is a requirement in the current regulation and is necessary to prevent the artificial spread of ACP on bulk citrus fruit. There is no substantive change.

CCR Section 3435 Subsection (d)(2)(B) establishes that articles or commodities originating in Bulk Citrus Regional Quarantine Zone 1 may be moved directly through and delivered to the other bulk citrus regional quarantine zones without delay and by a direct route in an enclosed vehicle or container or completely enclosed by a covering to prevent exposure to ACP while transiting the other quarantine zones. This is necessary to allow bulk citrus from the Bulk Citrus Regional Quarantine Zone 1 to move into the other bulk citrus regional quarantine zones without additional restrictions because Zone 1 is comprised of counties that are not infested with ACP and therefore a low risk for spreading ACP.

CCR Section 3435 Subsection (d)(3) establishes restrictions that prevent possible carriers of ACP from moving out of a regional quarantine zone unless treated or cleaned in an approved manner. This is necessary because any appliances or machinery involved in growing, harvesting, processing, or hauling ACP-host material may be possible carriers of ACP, and must therefore be treated or cleaned before leaving a regional quarantine zone in order to prevent spreading ACP.

**Economic Impact Analysis**
The proposed revisions to the regulation do not impose a mandate on local agencies or school districts and no reimbursement is required under Section 17561 of the
Government Code. Each county agricultural commissioner in a county where ACP has been detected has requested the State to implement a state interior quarantine for ACP.

With the adoption of the amendment to Section 3435, the Department cannot predict or estimate the cost to maintain the proposed regulation due to the increased workload in some areas of the state and the decreased workload in other areas. To implement this amendment to the regulation, some counties that are currently partially quarantined for ACP would become fully quarantined and designated to a regional quarantine zone. As a result, several establishments currently not within an ACP quarantine area would now require regulating. The Department expects 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.

The cost impact of the changes in the regulations on private persons and businesses are expected to be insignificant. 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.

The Department has determined that there are approximately 1,680 production nurseries and 3,958 retail nurseries currently operating under a compliance agreement in an ACP-quarantined area defined by the current Section 3435(b). An additional 656 production and 1,652 retail nurseries would newly be included in the Nursery Regional Quarantine Zone 2 and may be impacted by having to comply with quarantine restrictions. The numbers of additional nurseries were sourced from the total number of nurseries in partially quarantined counties that have a nursery license but not an ACP compliance agreement. The exact number of these nurseries that produce or sell citrus nursery stock and that would be impacted by the new regulation is unknown. The cost of compliance for nurseries was calculated using the average pesticide cost per plant
for foliar and drench treatments and the average plant applicator costs. The assumptions include:

- At any one time, plants will cover two thirds of the acreage in a nursery
- The cost per ounce of pesticide used
- The cost of approved foliar pesticide per plant as determined
- The cost of approved drench pesticide per plant as determined
- The costs of application
- Each nursery has an average of one tenth of an acre of host material
- Each nursery sells one tenth of an acre of host material per year (approximately 719 plants/year)

There are many variables that may impact the cost for compliance. There are currently 11 different systemic and 9 different foliar labeled products that are registered for use in California and that may be used for treatment to obtain quarantine certification. Product costs vary based upon the given volume purchased at any one time. The type of application, drenching or foliar, affects the cost of application, and the specific product used may affect the length of time the plant material is eligible for quarantine certification.

The length of time to treat an acre varies depending on the size of the container holding the nursery stock (e.g., one gallon container versus 36” box), the size and spacing of the containers, and the spacing and size of walkways and roadways.

Other factors that may affect the cost of compliance include:

- How long the nursery stock is held at the affected nursery prior to its sale and the need to have replacement stock in the production cycle
- Pending sales contracts that determine the nursery’s choice of approved materials to use
- Labor costs
• Whether the nursery has a qualified pesticide applicator on site or has to hire one
• The size of the nursery
• The availability of the necessary treatment equipment and type of equipment
• Differences between start-up and ongoing costs
• The number of nursery crops per year in the production cycle

Therefore, rather than there being a single prescriptive treatment, there are a number of possible treatment combinations, which are based upon the biological risk of the nursery stock being exposed to a live life stage of ACP. The treatment combinations are available to achieve the performance standard, which is to eliminate live life stages of ACP from nursery stock.

To calculate the average cost per citrus tree, the Department used a figure of one citrus tree per four square feet. This results in 7,187 container trees per acre based upon the assumption of an average of two thirds of an acre being occupied by plants in the production nursery.

The estimated cost to apply an approved foliar pesticide is $0.01 per plant. Estimated applicator cost is $1.00-$4.37 per plant depending upon whether the nursery conducts the application or hires a pesticide applicator. Based upon the following assumptions, the cost to the nursery is $1.01-$4.62 per plant or $7,258.87-$33,203.94 per acre per treatment. The cost estimate per acre is based upon citrus-only nursery stock within that acre.

The estimated cost to apply an approved drench pesticide is $0.23 per plant. Estimated applicator cost is $1.00-$4.37 per plant depending upon whether the nursery conducts the application or hires a pesticide applicator. Based upon the following assumptions, the cost to the nursery is $1.23-$4.84 per plant or $8,840.01-$34,785.08 per acre per treatment. The cost estimate per acre is based upon citrus-only nursery stock within that acre.
Assumptions: On average, in a production nursery, plants to be treated will cover not more than 2/3 of the acreage in a nursery (accounting for walkways, rows, and space between plants).

The Department has also determined there are 4,787 citrus growers, 231 citrus packers/processors, and 481 citrus transporters operating under a compliance agreement within the current ACP quarantine area. An additional 81 citrus growers would newly be included in an ACP regional quarantine zone and would be impacted by having to comply with quarantine restrictions. (Reference: Rick Dunn, Citrus Research Board). Based on the preceding information, it was determined that the revision and subsequent amendments of Section 3435 may have a moderately adverse economic impact on growers if they send fruit to a packing house or processor in a different regional quarantine zone. Growers currently outside of an ACP quarantine area that would be included in bulk citrus regional quarantine zones 2, 3, 4, 5, 6, or 7 would have to implement a performance standard to ensure hosts are free from ACP. Current mitigation options include: 1) conduct pre-harvest treatments with a pesticide effective against psyllids while the fruit is still on the trees; 2) field clean the fruit to remove leaves and stems during the harvest process; 3) wet wash the citrus fruit; 4) send the fruit to a packing house within the same quarantine region and have the packing house remove the leaves and stems during the packing process; 5) any other Department approved, validated, and efficacious methods of mitigating the risk of spreading ACP. The following estimated costs are taken from the growers who are currently within ACP quarantine areas.

1. The estimated cost to conduct pre-harvest treatments is $20 per acre for the pesticide and $40 per acre for the application. Thus, the grower cost is approximately $60 per acre. Additional costs to the grower or to the hauler are for tarps required to cover the loads while in transit. Tarps range in price from $2,500-$3,000 each. It will cost the grower an additional $1 per bin ($50 per truck load) to tarp and transport the fruit from the field to the packing house.

2. The estimated cost to field clean the fruit is $5-$8 per bin. Depending on the citrus variety, there are approximately 30-40 bins per acre. Thus, the grower cost
is approximately $150-$320 per acre. Additional costs to the grower or to the hauler are for tarps required to cover the loads while in transit. Tarps range in price from $2,500-$3,000 each. It will cost the grower an additional $1 per bin ($50 per truck load) to tarp and transport the fruit from the field to the packing house.

3. The estimated cost for packing house cleaning is $10 per bin. At 30-40 bins per acre, the grower cost is approximately $300-$400 per acre. These loads must remain within the regional quarantine zone. Additional costs to the grower or to the hauler are for tarps required to cover the loads while in transit. Tarps range in price from $2,500-$3,000 each. It will cost the grower an additional $1 per bin ($50 per truck load) to tarp and transport the fruit from the field to the packing house.

Creation or Elimination of Jobs within the State of California Assessment
The regulation is designed to minimize the spread of ACP and HLB to ensure that the devastating damage caused by HLB is limited to the smallest area possible. Compliance activities are currently being performed by existing state staff throughout quarantine areas within the State. The Department has been conducting quarantine actions throughout the State for over 30 years without causing significant creation or elimination of jobs. 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.

Creation of New or Elimination of Existing Businesses Within the State of California
The regulation is designed to minimize the spread of ACP and HLB to ensure that the devastating damage caused by HLB is limited to the smallest area possible. Compliance activities are currently being performed by existing state staff throughout quarantine areas within the State. For several years, many citrus related businesses have been subject to similar quarantines without being eliminated. The Department has been conducting quarantine actions throughout the State for over 30 years without
causing significant creation or elimination of businesses. Therefore, the Department has determined that this regulatory proposal will not have a significant impact on the creation of new businesses or the elimination of existing businesses in the State of California.

**Expansion of Businesses Within the State of California**

The regulation is designed to minimize the spread of ACP and HLB to ensure that the devastating damage caused by HLB is limited to the smallest area possible. These activities are currently being performed by existing state staff throughout quarantine areas within the State. The Department has been conducting quarantine actions throughout the State for over 30 years without causing significant expansion of businesses. Therefore, the Department has determined that the regulatory proposal will have no significant impact on expansion of businesses in California.

**Benefits of the Regulations**

The regulation is designed to minimize the spread of ACP and HLB, thereby ensuring that the devastating damage caused by HLB is limited to the smallest area possible. The adoption of this regulation benefits the citrus industries (nursery and fruit) and the environment by specifying or limiting the movement of citrus commodities that are at risk for spreading ACP and HLB. The proposed revision to the regulation will help prevent or slow the spread of ACP and HLB, thus protecting California’s citrus industry. Preventing the spread of HLB will also help keep consumers’ cost low and the quality of the product high. Should HLB spread to areas of commercial citrus production, the quality of the product will decline and result in a higher consumer cost for fresh citrus fruit.

**California Environmental Quality Act**

A Statewide Plant Pest Prevention and Management Program Environmental Impact Report (PEIR) was prepared by the Department as the lead agency under the California Environmental Quality Act. The PEIR addresses the potential impacts and mitigations
when implementing the Statewide Plant Pest Prevention and Management Program activities related to ACP and HLB.

The PEIR may be accessed at the following website:
http://www.cdfa.ca.gov/plant/peir/

**Assessment**
The Department has made an assessment that the revision of the regulation would not
1) create or eliminate jobs in California, 2) create new businesses or eliminate existing
businesses within California, or 3) affect the expansion of businesses currently doing
business within California.

There are no known specific benefits to the worker safety or the health or public safety
of California residents. The proposed regulations would maintain a high quality of citrus
nursery stock and citrus commodities and limit the spread of ACP and HLB in California.

As required by Government Code Section 11346.5(a)(3)(D), the Department has
conducted an evaluation of this regulation and has determined that it is not inconsistent
or incompatible with existing state regulations.

**Consultation with Other Agencies and Stakeholders**
The Department of Food and Agriculture has consulted with numerous stakeholders
through five scoping meetings held throughout the state. Two scoping meetings were
held in Tulare County, one in Ventura County, one in San Bernardino County, and one
at CDFA Headquarters in Sacramento. At these scoping meetings, CDFA presented
proposed regulation changes and received related comments. A summary of the
scoping meetings can be found in the Appendix.

**Alternatives Considered**
The Department of Food and Agriculture has determined and presented to the
California Citrus Pest and Disease Prevention Committee (CCPDPC) three alternatives
to the proposed regional quarantine. None of the alternatives were selected because the proposed regional quarantine, as recommended by the committee and approved by the Secretary, was determined to be the most effective way to protect California’s citrus industry. The three presented options are as follows:

1. Maintain the current state interior quarantine. The current quarantine response is a five-mile quarantine around each single ACP detection. The Department has rejected this approach because the current ACP quarantine regulation does not adequately address the heightened risk of artificial movement, and the HLB quarantine only applies where HLB is known to occur.

2. Remove the state interior quarantine. There would be no interior quarantine for intrastate movement. USDA would quarantine the entire state and regulate interstate shipments of host material. The Department rejected this alternative because it would unnecessarily impact host nursery stock growers and bulk citrus growers in uninfested areas that would otherwise not be included in a federal quarantine area. It would also increase the risk of artificial spread of ACP within the state because there would be no intrastate movement restrictions and all regulated articles would be free to move throughout the state.

3. Alternative control program. Host material would only be allowed to move from or between areas that are actively engaged in ACP area-wide management or certified as ACP free. The Department rejected this alternative because participation in an ACP area-wide management zone is not mandatory and the pest risk between the different management areas would not be equivalent due to differing levels of ACP populations in different parts of the state and variations in treatment efficacy. Certifying every shipment of host material as ACP-free is not feasible due to resource and budget constraints.
Information Relied Upon
The Department is relying upon the following studies, reports, CPDPC motions, and documents in proposing the revision of Section 3435:


2. Presentation by Dr. Grafton-Cardwell, “California Citrus ACP Issues.”


4. Minutes, dated 2/27/2015, California Citrus Pest and Disease Prevention Committee (CCPDPC).

5. Minutes, dated 4/27/2015, CCPDPC.

6. Minutes, dated 6/10/2015, CCPDPC.

7. Minutes, dated 7/7/2015, CCPDPC.

8. Minutes, dated 10/20/2016, CCPDPC.

9. Signed Motions, dated 10/21/2016, CCPDPC.

10. Minutes, dated 1/11/2017, CCPDPC.

11. Signed Motions, dated 1/13/2017, CCPDPC.


14. Nursery regional quarantine map recommended by the CPDPC, 10/27/2016.

15. Bulk citrus regional quarantine map recommended by the CPDPC, 10/20/2016.


17. Initial regional quarantine map for bulk citrus movement, August 22, 2017.

18. Pest and Damage Record (PDR) for latest detection in each county:

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