FINDING OF EMERGENCY

The Secretary of the Department of Food and Agriculture determined that an emergency exists; the Asian citrus psyllid (ACP), *Diaphorina citri* was detected for the first time in Coachella and Mecca, Riverside County. The Department is proposing an emergency amendment of the regulation to expand the quarantine area to include a new portion of Riverside County into the regulation.

Emergency Defined

"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. Government Code Section 11346.1(b)(1).

In this document the Department is providing the necessary specific facts demonstrating the existence of an emergency and the need for immediate action to prevent serious harm to the general welfare of the citizens of California, pursuant to Government Code Section 11346.1(b)(2).

Government Code Section 11346.1(a)(2) requires that, at least five working days prior to submission of the proposed emergency action to the Office of Administrative Law, the adopting agency provide a notice of the proposed emergency action to every person who has filed a request for notice of regulatory action with the agency.

After submission of the proposed emergency to the Office of Administrative Law, the Office of Administrative Law shall allow interested persons five calendar days to submit comments on the proposed emergency regulations as set forth in Government Code section 11349.6

The information contained within this finding of emergency also meets the requirements of Government Code Sections 11346.1 and 11346.5.

California Environmental Quality Act

"Specific actions necessary to prevent or mitigate an emergency" are exempt from the California Environmental Quality Act (CEQA). Public Resources Code Section 21080(b)(4). "Emergency' means a sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services." Public Resources Code Section 21060.3.

Statutory Exemption

Title 14, California Code of Regulations Section 15269, subdivision (c) "Specific actions necessary to prevent or mitigate an emergency."

Categorical Exemption

Title 14, California Code of Regulations, Section 15308. "Class 8 consists of actions taken by regulatory agencies, as authorized by state or local ordinance, to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment."

For the reasons set forth in this document, this constitutes a specific act necessary to prevent or mitigate an emergency and is also an action required for the preservation of the environment.

The Secretary is proposing to amend this regulation pursuant to the authority in Food and Agricultural Code (FAC) Section 407, "the director may adopt such regulations as are reasonably necessary to carry out the provisions of this code which he is directed or authorized to administer or enforce," and FAC Section 5322, "the director may establish, maintain, and enforce quarantine, eradication, and such other regulations as are in his or her opinion necessary to circumscribe and exterminate or prevent the spread of any pest which is described in FAC Section 5321."

Additionally, 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" and Section 403 states, "the department shall prevent the spread of injurious insect pests."

The Department is the only agency which can implement plant quarantines. 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.

Evidence of an Emergency

On June 7 (California Pest and Damage Record (PDR) RV0P06089665) and July 3 (PDR PD0P06040441), 2012, adult Asian citrus psyllids were trapped in Coachella. On July 3, 2012 (PDR RV0P6089641), an adult Asian citrus psyllid was trapped in Mecca but due to the large volume of samples at the Department's laboratory it was not identified until July 16, 2012. Mecca is also located within the Coachella Valley area of Riverside County. These detections meet the State's and federal regulatory protocol for expanding the quarantine area in this area which includes a portion of Riverside County.

By itself, ACP causes only minor cosmetic damage to citrus trees. However, when it becomes infected with Huanglongbing (HLB or citrus greening), it becomes a carrier for the disease and can transmit the HLB-associated bacteria from the fourth nymphal instar through the adult stage with a latency period as short as one day or as long as 25 days. HLB was first identified in China in 1919 and is considered to be the most devastating of all citrus diseases. 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.

HLB has been introduced into the Hacienda Heights area of Los Angeles County. It remains critical to continue to prevent the artificial spread of ACP over long distances. The Department has confirmed that just outside the existing quarantine boundary there are citrus groves, a green waste facility and at least one nursery.

Both ACP and HLB are federal action quarantine pests subject to interstate and international quarantine restrictions by the United States Department of Agriculture (USDA). Both ACP and HLB now occur in Mexico and HLB has continued to spread to the north and now occurs south of the State of Sonora. In mid-January of 2012, HLB was confirmed in the Rio Grande Valley of Texas. Additionally, in July of 2009 ACP nymphs were intercepted in a plant shipment from India sent to the Fresno area which tested positive for HLB. It is imperative that the Department prevent the artificial spread of ACP wherever possible to ensure the devastating damage caused by HLB is limited to the smallest area possible.

California is the number one economic citrus state in the nation, with the USDA putting the value of California citrus at \$1,131,851,000 (Federal Register Vol. 71 No.83; published May 1, 2006; pg 25487). A 2002 report by the Arizona State University School of Business indicates that there is at least \$825.6 million of direct economic output and another \$1.6 billion when all upstream suppliers and downstream retailers are included. This represents over 25,000 direct and indirect employees. To protect this source of revenue, California must do everything possible to exclude both HLB-associated pathogens and ACP from the state.

The current study by the University of Florida Extension calculated and compared the impact of having and not having HLB present. Their economic analysis concluded HLB had a total impact of \$3.64 billion and eliminated seven percent of the total Florida workforce. For 2008 in Florida, the estimated increased production costs for citrus range from \$266 to \$332 million. There are approximately 600,000 acres of citrus in production in Florida. This translates into increased production costs of \$443 to \$553 per acre. This estimate is based upon an eight dollar per tree replacement cost. In California, the estimated cost to replace a tree is from \$10 to \$20. Using a cost of \$15 per tree would push the projected production costs up to \$450 to \$550 per acre. The estimated citrus acreage in 2008 in California is approximately 290,000 acres. The projected increased citrus production costs in California would be at least \$130.5 to \$159.5 million.

The Department uses Geographic Information Systems (GIS) mapping programs to plot locations of all the detections of ACP. As a result, based upon the criteria contained in the USDA regulatory protocol, the Department determined that there are new infestations of ACP requiring the expansion of the quarantine area.

On April 27, 2011, the USDA issued a new interim rule which quarantines the states of Florida, Georgia and Puerto Rico, the US Virgin Islands and two parishes in Louisiana and two counties in South Carolina due to the presence of HLB. Additionally, this rule also quarantined Alabama, Florida, Georgia, Guam, Hawaii, Louisiana, Mississippi, Puerto Rico, Texas, the U.S. Virgin Islands, three counties in South Carolina, portions of one county in Arizona, and all of three and portions of an additional three counties in California due to the presence of Asian citrus psyllid,

The USDA cannot regulate less than an entire state unless the state has a quarantine regulation which is substantially the same as what the existing federal rule requires for interstate movement. On July 19, 2012, the USDA State Plant Health Director notified the Department that it is necessary to expedite the expansion of the quarantine area for ACP to encompass the latest find surrounding the finds in Coachella and Mecca, Riverside County. Once the Department amends its regulation, this will enable the USDA to amend their federal regulation or order. If the Department fails to implement a quarantine on an emergency basis, the USDA may consider quarantining all of California in order to immediately prevent the affected nursery from shipping interstate.

Therefore, it is necessary to amend this regulation by adding a portion of Riverside County as an emergency action.

Project Description

This proposed emergency action will expand the quarantine area for ACP by approximately 832 square miles. The proposed boundary lines were drawn jointly by the United States Department of Agriculture (USDA), the California Department of Food and Agriculture, and the Riverside County Agricultural Commissioner. The criterion for determining quarantine boundaries around an epicenter was based upon the information obtained from the USDA. The entire counties of Imperial, Los Angeles and Orange; and, portions of Riverside, San Bernardino and Riverside are already under quarantine for ACP. The total proposed quarantine area would then become approximately 21,538 square miles.

The effect of the amendment of this regulation will be to implement the State's authority to perform quarantine activities against the ACP in this additional area of Riverside County. Any quarantine actions undertaken by the Department will be in cooperation and coordination with the USDA and the affected county agricultural commissioners. It is immediately necessary to implement quarantine actions in order to prevent the artificial spread of ACP.

Background

The California citrus industry has taken a great deal of responsibility in preparing for the introduction and establishment of HLB-associated bacteria and psyllid vectors. Funding has been allocated towards research on easy, early (i.e., pre-clinical) detection methods (i.e., one primer set to detect all strains rather than primer sets specific for each known strain; host systemic responses) and the identification of HLB-associated bacterial strains, and vector relationships. In addition, a public relations firm has been hired to determine the most effective and efficient methods to educate the general public and make them feel as though they are part of the solution. Industry leaders (research and marketing boards) are involved in procuring federal funds for national research programs in the areas of host plant resistance, etiological agents and variants of HLB, specific native and exotic natural enemies of the insect vectors, and pesticide efficacy and new chemistries.

California citrus industry leaders recognized how Florida was at a loss of ample supplies of HLB-free citrus stock when the pathogen was detected in 2005. As a result, plans are underway to expand the screenhouse facility at the UC Lindcove Research and Extension Center that houses the industry's pathogen-free budwood source to allow for the protection of additional varieties. Other alternatives are being considered to protect valuable citrus propagation sources, germplasm, and breeding material such as isolated and/or protected locations and tissue culture. For long-term survey and management, the industry may pursue the formation of pest control districts.

During ACP workshops held in Riverside on June 11 and 12, 2009, several critical presentations were made regarding the ACP/HLB vector disease complex including the following:

- 1. FundeCitrus (a research institute funded by Brazilian farmers and the juice industry) staff described the devastating impact of HLB in Brazil. HLB was present in one grove in 30 in 2004 but spread to one in five by 2008. FundeCitrus and the citrus industry lobbied successfully for a federal law which, since 2005, makes it an offense to leave a HLB-infected orange tree planted once laboratory tests have diagnosed the disease. Subsequent data showed less than one percent of trees were infected after the federal law became effective.
- 2. AVASA (the national certification program in Spain) staff describing the Spanish citrus certification program which, since 1996, has required 100 percent of citrus propagative source materials to be produced under screen.
- 3. A Florida citrus nurseryman described the impact of ACP, HLB and citrus canker on the Florida citrus industry and the resulting regulations. Two counties were known to be infected with HLB in 2005. By 2008, HLB had been identified in 32 counties. Florida hopes to manage HLB by a three pronged approach: starting with disease-free nursery trees (all citrus nursery stock and the propagative sources of the stock must be maintained in insect-resistant structures), scouting for and removing infected trees and controlling the ACP.

In Florida and countries where HLB exists, insecticides have been a first line of defense to eliminate the psyllid vector, thereby reducing the spread of the HLB-associated pathogens. Applying insecticide sprays at critical flushing periods in order to kill psyllid nymphs may be an effective method of HLB. In accordance with integrated pest management principles (IPM), the Department will evaluate all appropriate mechanical, biological, cultural and treatment control options which may be efficacious to prevent the artificial spread of HLB infested ACP. If a treatment option is chosen, as insecticide use registrations vary between crops and urban areas and between fruit trees and ornamentals, any treatment program will need to be tailored to each situation.

The implementation of biological control methods (the use of beneficial organisms to attack pest populations) will be an important component of an integrated pest management program to reduce populations of the ACP. As there are no known psyllids in California citrus, exotic natural enemies from the pest's area of origin may need to be imported into the United States or from Florida under strict quarantine protocols. There may be some generalist predators such as the

coccinellid beetles that will come into citrus from other habitats but to what extent these would be effective is not known at this time. Natural enemies obtained from commercial sources or mass reared by government or industry personnel can be periodically released into field situations once the psyllid becomes established.

Populations of ACP in Florida are fed upon by many generalist arthropod predators such as spiders, lacewings, hover flies or syrphids, and minute pirate bugs, and are attacked by a number of parasites. The coccinellids exert the greatest amount of control. Two lady beetles, *Olla v-nigrum*, which is native to California and *Harmonia axyridis*, are the most important predators of ACP nymphal stages in Florida. *H. axyridis* was imported from Japan to control the pecan aphid and is established in parts of California. Two tiny parasitic wasps have been imported and released in Florida. *Tamarixia radiata* was imported from Taiwan and Vietnam, and *Diaphorencyrtus aligarhensis* was imported from Taiwan. *Tamaraxia radiata* has already been imported into California and releases of this parasitoid have occurred.

The Department also relied upon the following information:

Pest and Damage Records RV0P089665, PD0P06040441 and RV0P6089641, California Department of Food and Agriculture, Plant Health and Pest Prevention Services.

Email dated July 19, 2012, from Helene Wright to Stephen Brown.

Economic Impacts of Citrus Greening (HLB) in Florida, 2006/07-2010/11, University of Florida IFAS Extension.

Federal Register, Vol. 76, No. 81, dated April 27, 2011, Docket No. APHIS-2010-0048, Citrus Canker, Citrus Greening and Asian Citrus Pysllid; Interstate Movement of Regulated Nursery Stock.

"New Pest Response Guidelines, Citrus Greening Disease," dated June 2, 2008, United States Department of Agriculture, Animal and Plant Health Inspection Service.

Authority and Reference Citations:

Authority: Sections 407 and 5322, Food and Agricultural Code.

Reference: Sections 407 and 5322, Food and Agricultural Code.

Informative Digest

Existing law provides that the Secretary is obligated to investigate the existence of any pest that

is not generally distributed within this state and determine the probability of its spread and the

feasibility of its control or eradication (FAC Section 5321).

Existing law also provides that the Secretary may establish, maintain and enforce quarantine,

eradication and other such regulations as he deems necessary to protect the agricultural industry

from the introduction and spread of pests (Food and Agricultural Code, Sections 401, 403, 407

and 5322).

Anticipated Benefits from This Regulatory Action

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 which she is directed or authorized

to administer or enforce.

Existing law, FAC section 5321, provides that the Secretary is obligated to investigate the

existence of any pest that is not generally distributed within this State and determine the

probability of its spread, and the feasibility of its control or eradication.

Existing law, FAC section 5322, provides that the Secretary may establish, maintain, and enforce

quarantine, eradication, and such other regulations as are in her opinion necessary to

circumscribe and exterminate or prevent the spread of any pest which is described in FAC

section 5321.

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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. The adoption of this regulation benefits the citrus industries (nursery and fruit) and the environment by having a quarantine program to prevent the artificial spread of HLB over long distances; thus confining its devasting impacts to the smallest area possible. Almost all of the commercial citrus fruit and nursery stock production is located outside this proposed quarantine boundary area.

The California consumers benefit as the fruit from host trees infected with HLB is inedible. Confining the HLB infestation to the smallest area possible ensures citrus fruits and other host fruits are available for consumption and at reasonable prices.

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." The adoption of this regulation is confining HLB to a primarily urban environment and achieves this statutory goal. HLB is generally distributed in Florida. The University of Florida IFAS Extension calculated and compared the impact of having and not having HLB present in Florida and concluded HLB had a total impact of \$3.64 billion and eliminated seven percent of the total Florida workforce. The overall California economy benefits by the adoption of this regulation which is intended to prevent HLB from becoming generally distributed in California and resulting in a similar affect on our economy as to what happened in Florida.

The United states Department of Agriculture (USDA) maintains a federal domestic quarantine regulating the interstate movement of host material. If the State does not have a parallel interior quarantine which is substantially the same as the federal domestic regulation, the USDA cannot regulate less than the entire State. The adoption of this State regulation will prevent the USDA from having to unnecessarily regulate the entire State.

The Department is the only agency which can implement plant quarantines. 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.

Section 3435. Asian Citrus Psyllid Interior Quarantine.

This proposed emergency action will expand the quarantine area for ACP by approximately 832 square miles by including the Coachella Valley area of Riverside County. The effect of the amendment of this regulation is to provide authority for the State to perform quarantine activities

against ACP within this additional area and existing regulated areas. The total area which would be under regulation is now approximately 21,538 square miles.

Mandate on Local Agencies or School Districts

The Department of Food and Agriculture has determined that Section 3435 does not impose a mandate on local agencies or school districts, except that an agricultural commissioner of a county under quarantine has a duty to enforce it. No reimbursement is required under Section 17561 of the Government Code because the affected county agricultural commissioners requested that these changes to the regulation be made.

Cost Estimate

The Department has also determined that the regulation will involve no additional costs or savings to any state agency because initial funds for state costs are already appropriated, no nondiscretionary costs or savings to local agencies or school districts, no reimbursable savings to local agencies or costs or savings to school districts under Section 17561 of the Government Code and no costs or savings in federal funding to the State.