



CALIFORNIA DEPARTMENT OF
FOOD & AGRICULTURE

Karen Ross, Secretary

April 9, 2019

Teresa Marks, Interim Director
California Department of Pesticide Regulation
1001 I Street
Sacramento, CA 95812-4015

Dear Ms. Marks:

Re: Proposed Risk Management Directive for Chlorpyrifos

The California Department of Food and Agriculture (CDFA) has reviewed The Department of Pesticide Regulation's (DPR) proposal titled Proposed Risk Management Directive for Chlorpyrifos, dated March 27, 2019, and received April 2, 2019. The proposed regulatory action would cancel all uses of the insecticide chlorpyrifos. We provide these comments as required by FAC section 11454.2, and the January 15, 2019 Memorandum of Understanding which was developed as provided in section 11454.2. While CDFA is not in a position to comment on adverse effects on the environment or public health and safety, we can provide comments on potential impacts on agriculture and benefits derived from the use of chlorpyrifos.

Chlorpyrifos is an insecticide used on several crops including nut, fruit, vegetable, grain and fiber crops throughout the state. The primary crops which use chlorpyrifos include alfalfa, almond, citrus, cotton, grape, and walnut. These crops had a combined farmgate value of \$17 billion in 2017. DPR has severely limited use of the insecticide chlorpyrifos after tightening permit conditions three times since 2015. Most counties adopted the Chlorpyrifos Interim Recommended Permit conditions developed by DPR in late 2017 and 2018. The latest permit conditions limit applications to very restrictive circumstances and a few critical pest problems. Critical uses were identified following a survey of pest management situations where few or no alternatives were available and to preserve use in case of emergencies and unanticipated pest outbreaks. Observations by County Agricultural Commissioner offices verify that use has and will continue to decline. University of California's Cooperative Extension Specialists also report that the new permit conditions have reduced use considerably. For example, the number of chlorpyrifos applications from 2017-2018 declined around 50% in Tulare county, around 25% in Kern and Fresno counties. Limited data from the early months of 2019 corroborate the continuing declines in use.



CDFA has not completed its economic analysis, expected July 2019, but it is likely that cancellation of chlorpyrifos in California will substantially increase pest management costs in several major crops, including alfalfa, almond, citrus, cotton, grape, and walnut. The particular alternatives to chlorpyrifos depend on specific crop and pest combinations, but in many cases existing alternatives are considerably more expensive or require multiple applications to achieve similar efficacy. Further, some alternative insecticides are more disruptive to biological control resulting in secondary pest outbreaks, others have limited use owing to resistance issues or export restrictions, and others are under regulatory scrutiny for a variety of reasons. In short, growers are faced with few options for replacing chlorpyrifos.

California agriculture is struggling with many different pressures, most recently suffering from the impacts of lost trade and increased tariffs caused by U.S. trade policy. Increased expenses and decreasing crop prices make it challenging for growers to use the higher cost alternatives that are currently available (Hamilton and McChullough, 2018). A case study on lettuce regulatory cost increases over the last decade, published by CalPoly San Luis Obispo in December 2018, documented new rules at both the state and federal levels that have imposed significantly higher regulatory impacts with respect to food safety, water quality, labor wages and benefits, air quality, and worker health and safety. The results of the study showed that the costs of regulatory compliance have risen by 795 percent over the decade. Weighing especially heavy on the minds of growers worried about long-term viability owing to less water reliability, is the predicted land fallowing of at least 585,000 acres in the San Joaquin Valley as a result of the state's Sustainable Groundwater Management Act implementation. That amount of fallowed acreage also has raised concerns of new weed and pest problems (Hanak, et al. 2019).

Chlorpyrifos has been restricted in Hawaii starting January 2019, and will be phased out completely by 2023. Congressman Udall (D-NM) introduced federal legislation in late March to ban its use and we are aware of legislation in eight states to ban its use. For the agricultural sector, this is a troubling trend that eliminates science and methodology from the complex pesticide regulatory process. Even commodities not affected by this proposal will raise concerns about the precedent it sets for what has historically been a dependable process of science, risk analysis, and risk mitigation to ensure public health, environmental protection and agricultural productivity.

Any proposal to mitigate the loss of chlorpyrifos must be meaningful. The establishment of a task force to recommend actions for transition should incorporate recommendations from previous exercises to evaluate California pest management and supporting the agricultural sector with best available IPM practices, technical assistance and demonstration projects. CDFA recommends a thorough evaluation with specific recommendations for investments in technical assistance offered through the University of California (UC)

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Cooperative Extension, the UC Statewide Integrated Pest Management Program, US Department of Agriculture's IR-4 program, DPR's Pest Management and Alliance grants, and a grant program to demonstrate IPM and biological pest management systems in the crops most affected by the loss of chlorpyrifos. New research programs should be investigated, perhaps modeled after successful UC programs in the past, e.g., the Biologically Integrated Farming Systems and Biologically Integrated Orchard Systems.

CDFA appreciates the opportunity to provide comments on this proposed regulation. Please feel free to contact me should you have any questions. I can be reached at 916-654-0433 or secretary.ross@cdfa.ca.gov.

Yours truly,



Karen Ross
Secretary

cc: John Steggall, Sr. Environmental Scientist
Office of Environmental Farming and Innovation

Literature Cited

Hamilton, L., and M. McCullough. 2018. A Decade of Change: A Case Study of Regulatory Compliance Costs in the Produce Industry. Cal Poly, San Luis Obispo.
https://digitalcommons.calpoly.edu/cgi/viewcontent.cgi?article=1156&context=agb_fac

Hanak E, A. Escriva-Bou, B. Gray, S. Green, T. Harter, J. Jezdimirovic, J. Lund, J. Medellín-Azuara, P. Moyle, N. Seavy. 2019. Water and the Future of the San Joaquin Valley. Public Policy Institute of California.
<https://www.ppic.org/publication/water-and-the-future-of-the-san-joaquin-valley/>