

Department of Pesticide Regulation

Gavin Newsom Governor

Jared Blumenfeld
Secretary for
Environmental Protection

August 12, 2019

Mr. Tim Pelican, President California Agricultural Commissioners and Sealers Association 2101 E. Earhart Avenue, Suite 100 Stockton, California 95201

Dear Mr. Pelican:

Thank you for the comments on the Department of Pesticide Regulation's (DPR's) Proposed Toxic Air Contaminant Control Measures for Chlorpyrifos. DPR is cancelling chlorpyrifos products because current use of chlorpyrifos results in detrimental public health effects from dietary and spray drift exposure. DPR appreciates that CACASA does not object to the proposal of cancellation generally.

The following responds to your specific questions and comments.

Question/Comment 1: Are current use levels being considered in DPR's computer models or studies? Could the numbers of the current use be recalculated across all aspects of the study and see where the use puts the exposure to "direct exposure to chlorpyrifos from spray drift, including inhalation, incidental hand-to-mouth, and dermal exposures; dietary exposure; drinking water exposure; and aggregate exposure"?

Response: DPR acknowledges that CACASA's preliminary assessment of unverified pesticide use data indicates that use of chlorpyrifos has declined dramatically since DPR's recommended interim permit conditions became effective on January 1, 2019. However, the cancellation is intended to address impacts from acute exposure to chlorpyrifos from individual applications. Therefore, a decrease in overall use of chlorpyrifos has little impact on the health risks the control measure is intended to address. DPR's current computer modeling and calculation of the levels of risk associated with individual chlorpyrifos applications are based on what applications are allowed under the recommended interim conditions. The recent decrease in overall use will have no effect on DPR's computer modeling and calculation of the level of risk associated with an individual application.

Question/Comment 2: We were unable to determine if there was a specific mitigation goal published and if this decrease was close to reaching it.

Response: DPR's risk management directive (RMD) established two regulatory targets, one for air concentrations and one for aggregate exposure (inhalation, dermal, and ingestion combined exposure). The regulatory target is the level that DPR's control measures should meet. For air concentrations, the regulatory target concentration is 4.05 micrograms per cubic meter (μg/m³). For aggregate exposures, the regulatory target dose is 0.0001 milligrams per kilogram per day (mg/kg/day). As mentioned above, a decrease in overall use of chlorpyrifos in 2019 has no effect on whether acute exposure from an individual application will exceed the regulatory target concentration or dose. To mitigate acute exposure from spray drift, DPR would typically require buffer zones or setbacks. Figures 1 – 3 of the proposed control measures document show that the current estimated spray drift exposure for a typical individual application exceeds one or both regulatory targets at ½ mile from the application. Therefore, the ¼ mile buffer zone in the current interim recommended permit conditions does not adequately mitigate spray drift exposure. Further, these conditions do not address unacceptable dietary exposure at all.

Question/Comment 3: Given the premise that the cancellation is based on chlorpyrifos being an air toxic contaminant, we are also requesting to know if granular and drip applications are a risk and therefore may be preserved as a use. We ask that DPR clarify if registered chlorpyrifos products identified as not causing spray drift or dietary exposure (e.g., granular formulations) could be exempt from this cancellation proposal.

Response: DPR's toxic air contaminant risk characterization document for chlorpyrifos focused on risks from spray drift and dietary exposures. Therefore, at this time, DPR is cancelling products that result in spray drift or dietary exposures of concern. This does not include granular products because DPR lacks evidence at this time regarding drift and dietary exposure from granular applications. However, DPR will actively review exposures associated with chlorpyrifos products it did not propose to cancel. There are no products registered exclusively for use via drip irrigation and such applications may result in unacceptable dietary exposures.

Question/Comment 4: On page 2 of the Proposed Toxic Air Contaminant Control Measure for Chlorpyrifos dated July 1, 2019, states that "use of chlorpyrifos products consistent with the recommended permit conditions, label application rates, and other requirements does not limit exposures from spray drift and dietary sources [to the regulatory target concentration and dose] ..." We request DPR provide clarifying data that supports this statement.

Response: See response to Question/Comment 2.

Question/Comment 5: CACASA feels that with the decreased use overall in California, enforcing a statewide set of setbacks and buffer zones would be feasible and not logistically complex. Setbacks could be easily established, while there are some changing variables, they are generally based on the site not pests or timing. We request that County Ag Commissioners be given flexibility to continue to exercise discretion based on their local needs, geography and cropping patterns.

Response: DPR is cancelling chlorpyrifos products because current use of chlorpyrifos results in detrimental public health effects from dietary and spray drift exposure. For the reasons stated in the control measure consultation document, DPR does not believe that establishing and enforcing large setbacks and buffer zones is feasible statewide. Further, their enforceability is not directly relevant to the basis for the cancellation. DPR intends to cancel products that will result in detrimental health effects when properly used according to the product's registered label, interim recommended permit conditions, and other statutory and regulatory restrictions. DPR acknowledges that Country Agricultural Commissioner discretion is appropriate in certain instances, but notes that the detrimental public health effects associated with chlorpyrifos spray drift and dietary exposures require cancellation.

Question/Comment 6: The 2018 Final Toxic Air Contaminant Evaluation of Chlorpyrifos RCD states on pg. 76, of the 58 illegal chlorpyrifos detections, "most or all of which were imported". From this, it stands to reason that California growers are not the problem for the chlorpyrifos detections.

Given the data indicates imports as the source for dietary exposure, as part of a mitigation effort, can the State initiate more consistent testing of products coming into the state? To achieve improved safeguards for the health of 40 million Californians, the mitigation needs to be based on data, otherwise this extensive measure to ban chlorpyrifos will leave most Californians with the same risk level of dietary exposure.

Response: Page 76 of the RCD also says that "Neither DPR nor US EPA assesses the health implications of illegal residues on agricultural commodities in their dietary exposure assessments, which are restricted to analyzing the health implications of legal residues." DPR's estimates of health risk are for legal food residues, from crops grown inside and outside of California. Even if DPR could increase the testing of food, DPR acknowledges that its cancellation of chlorpyrifos use in California will not completely mitigate the dietary risk associated with food imported from other states or countries. Cancellation is the most effective regulatory action DPR can take to reduce dietary exposure from food residues in California.

Question/Comment 7: An additional concern is the use of chlorpyrifos in export and interstate commerce. Commissioners currently follow the procedures and chemistries outlined in the USDA Treatment manual for approved treatment measures. There are some examples which include drench treatments with chlorpyrifos for palm tree shipments destined to Arizona that originate in a Red Imported Fire Ant quarantine zone. Will DPR consider the exemption of chlorpyrifos in those situations which could include other quarantine insects (e.g., Asian Citrus Psyllid) that invade our state or for export requirements? Will DPR consider the exemption for 24C/Sec 18 uses of chlorpyrifos?

Response: DPR is not aware of any pest for which chlorpyrifos is the sole alternative for quarantine purposes. However, DPR will evaluate the appropriateness and justification, and any potential health impacts for a possible Section 24c registration or Section 18 exemption on a case-by-case basis.

Question/Comment 8: The assessment doesn't directly address exposure concerns of any non-food crops. Could chlorpyrifos be used on non-food crops such as cotton or industrial hemp (if labeled)? Could the data in this study be used to establish an application where a much larger buffer was required around a non-food crop?

Response: See response to Question/Comment 3.

Question/Comment 9: Given the lack of viable and sustainable alternatives for chlorpyrifos in a few crop protection scenarios, we suggest DPR explore applicator training and label amendments prior to going forward with cancellation. We are still in the pilot for a stewardship program for Paraquat which was initiated through a federal label change in 2019. In lieu of cancellation, could there be consideration to limiting the pool of applicators who are qualified to apply chlorpyrifos?

Response: Federal law prohibits DPR from requiring label amendments in addition to, or different from, those approved by U.S. EPA. DPR will consider training requirements and applicator restrictions if any use of chlorpyrifos is allowed to continue. However, any applicator or training requirements will not directly mitigate acute exposure and, therefore, could not replace or reduce any exposure mitigation measures that are necessary to meet the regulatory targets. DPR looks forward to actively participating along with members of CACASA in the cross-sector alternatives work group to identify, develop, and help growers transition to safer and more practical and sustainable alternatives to chlorpyrifos.

We value and appreciate your consultation on DPR's proposed control measure for chlorpyrifos. Please contact me if you have any questions.

Sincerely,

Dr. Karen Morrison Assistant Director 916-445-3984

cc: Mr. Val Dolcini, DPR Acting Director

Mr. Jesse Cuevas, DPR Assistant Director Mr. Daniel Rubin, DPR Chief Counsel

Mr. Joey Marade, DPR County/State Liaison

bcc: Ms. April Gatling, DPR Senior Staff Counsel Ms. Drew Saruwatari, DPR Staff Counsel