July 15, 2019

Karen Morrison
Ph.D. Assistant Director, Pesticide Programs Division
California Department of Pesticide Regulation (CDPR)
1001 I Street
Sacramento, CA 95814
Sent via email: Karen.Morrison@cdpr.ca.gov

RE: Proposed Toxic Air Contaminant Control Measure for Chlorpyrifos - July 1, 2019

Dear Ms. Morrison:

The California Agricultural Commissioners and Sealers Association (CACASA) welcomes the new administration to CalEPA and appreciates the opportunity to be a part of this process and provide comments to the Department of Pesticide Regulation (DPR) on the proposed control measures regarding the cancellation of chlorpyrifos. CACASA leadership looks forward to maintaining a collaborative relationship with DPR and CalEPA.

CACASA is comprised of Agricultural Commissioners and Sealers for California’s 58 counties. Each Commissioner, together with his or her agency’s staff, and the oversight of CDPR, is charged with enforcement of the California Food and Agricultural Code and the California Code of Regulations pertaining to agricultural food products and pesticide enforcement. California regulations help protect both the environment and the people of this great State. The laws and regulations pertaining to the safe use of pesticides are enforced through the staff of the commissioners on a daily basis. CACASA members, therefore, have a keen understanding of conditions in the field, unique local situations, the need for effective laws, rules and regulations pertaining to environmental protection and the fair competition among other states, and the potential effects of changes to existing rules and procedures would have on the industry at large. From the perspective of being the “boots on the ground” agency executing the recent restrictive permit conditions and witnessing the dramatic reduction in Chlorpyrifos, we would like to offer the comments below.

Background

Chlorpyrifos is a pesticide used to control a variety of insects on more than 60 crops, with the most common uses in California for nut trees, grapes, alfalfa, citrus, cotton, and several other food crops. Common use areas include the Central Valley, Central Coast region, and Imperial County. Although use in California has declined dramatically, there are currently several dozen chlorpyrifos products registered for use in California by approximately 20 different companies. In the agricultural context in particular, chlorpyrifos product labels allow for applications by aircraft, orchard and vineyard tractor air blast sprayers, tractor ground boom, granular applications through irrigation systems, and other applications. Beginning in January 2019, DPR
recommended that county agricultural commissioners require more restrictive permit conditions for chlorpyrifos. These included a prohibition on aerial applications, quarter-mile buffer zones, and limiting ground applications to certain crop/pest combinations that lack alternatives.

Under Food and Agricultural Code section 14024(a), DPR is required to consult with the agricultural commissioners, air pollution control districts and air quality management districts on the development of control measures for toxic air contaminants to reduce exposure to health protective levels. After consulting with the California Air Resources Board, the Office of Environmental Health Hazard Assessment, and the air districts, DPR determined that the cancellation of the registration of chlorpyrifos is the appropriate degree of control measure to achieve the selected regulatory target concentration and dose in its May 28, 2019 risk management directive.

Comments / Recommendations

Estimated Bystander Exposures to Chlorpyrifos

CACASA does not object to the proposal of cancellation. But to base the decision to cancel all uses on the printed label conditions without evaluating the actual use data since January 1, 2019 and reflecting the more restrictive use outlined in the interim permit conditions, is confusing. If the use could meet the mitigation level proposed by the Scientific Review Panel (SRP) and if the 2018 Risk Characterization Document (RCD) evaluated direct exposure to chlorpyrifos from spray drift, including inhalation, incidental hand-to-mouth, and dermal exposures; dietary exposure; drinking water exposure; and aggregate exposures is all based on the use and drift exposure, it could be reasoned that if the reduction in the actual use were to occur then all aspects of the study would be reduced as well. Are current use levels being considered in DPR's computer models or studies?

Below are some statistics that pertain to the reduced usage in 2019 and the above-stated question:

In 2016

- An estimated 100,000 gallons of liquid/dry flowable/dry wettable chlorpyrifos was applied
- An estimated 14,214 lbs. of granular chlorpyrifos product was applied (not part of the spray drift/dietary exposures)
- Total chlorpyrifos use was reported at 908,634 lbs.

In 2019 (January 1, 2019 to current July 14, 2019)

- An estimated 400 gallons of liquid/dry flowable/dry wettable chlorpyrifos was applied in the first six months of 2019. Projecting the use for a full year, indicates an estimated use of 800 gals. The use has decreased by 99.2% based on the current permit conditions.
- An estimated 4,371 lbs. of granular chlorpyrifos product was applied (not part of the spray drift/dietary exposure) in the first six months of 2019. Projecting the use for a full year indicates an estimated annual use of 8,742 lbs. The use has decreased by 38% based on the permit conditions of granular use.
- Estimated total chlorpyrifos use for the first six months of 2019 was 7,346 lbs. Projecting the use for a full year indicates an estimated use of 14,852 lbs. The overall use has decreased 98.4% based on the current permit conditions.

The interim permit conditions designed to mitigate risk are working to not only lower the overall use and exposure, but to keep a viable tool available to growers for emergency uses when alternative treatments are unsuccessful.

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”? We were unable to determine if there was a specific mitigation goal published and if this decrease was close to reaching it. 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.

An additional question, 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…” We request DPR provide clarifying data that supports this statement.

**Spray Drift Exposure to Chlorpyrifos**

Page 10 of the final consultation document states, “Establishing and enforcing two setbacks and one buffer zone, which all have varying distances, durations, and restrictions on who can enter, to effectively mitigate the serious adverse effects of chlorpyrifos exposure from spray drift is exceedingly and logistically complex, and ultimately infeasible for CACs and applicators to manage as a practical matter.”

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 the flexibility to continue to exercise discretion based on their local needs, geography and cropping patterns. For example – Kings County has a unique lake bottom that is cultivated without other businesses or homes within 15 miles. The CAC with guidance from DPR should be able to practice discretion for these unique permits where exposure from drift and dietary risk would be significantly reduced due to the distance from sensitive sites and types of commodities grown.

**Dietary Exposure to Chlorpyrifos**

Page 11 of the final consultation document states, “DPR is proposing cancellation of chlorpyrifos products that result in dietary exposure from residue because the proper use of these products results in residue levels that are associated with DNT effects in children and infants.”

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. Without testing every shipment coming in, the State would knowingly be exposing the consumer to the potential residue clearly outlined as an additional justification for the ban beyond air toxic contamination.

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.

**Export Concerns**

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?

**Final comments**

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?

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? A stewardship program to increase the professionalism and knowledge of those handling chlorpyrifos along with the current permit conditions already proving to show a shift in mitigation could be the right combination to safeguarding the public and the ongoing use of this AI to address issues that currently have no alternatives.

To be sure, CACASA appreciates the scientific approach that DPR has taken in evaluating this molecule and unequivocally agrees with the objective of removing hazardous exposures. To meet mitigation targets while maintaining certain specific uses until alternatives are discovered appears to us as a path forward worth considering. The tremendous reduction in overall use that has already occurred displays the willingness of our agricultural community to seek and use softer materials, but the need to preserve tools exists.

Thank you again for this opportunity to provide comment on the proposed cancellation of Chlorpyrifos

Respectfully Submitted,

TIM PELICAN, President  
California Agricultural Commissioners  
and Sealers Association (CACASA)

cc: CACASA Members  
    Joey Marade, DPR County Agricultural Commissioner Liaison