



Lauren Zeise, Ph.D., Director  
Jared Blumenfeld, Secretary for Environmental Protection  
Gavin Newsom, Governor

## MEMORANDUM

**TO:** Teresa Marks  
Acting Director  
Pesticide Programs Division  
Department of Pesticide Regulation  
1001 I Street  
Sacramento, California 95814

**FROM:** Lauren Zeise, Ph.D.  
Director 

**DATE:** April 8, 2019

**SUBJECT:** CHLORPYRIFOS – OEHHA COMMENTS ON DPR'S PROPOSED RISK MANAGEMENT DIRECTIVE (RMD)

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The Department of Pesticide Regulation (DPR) provided the Office of Environmental Health Hazard Assessment (OEHHA) with a draft of the department's proposed risk management directive (RMD) for chlorpyrifos (dated March 27, 2019). As stated in Food and Agricultural Code Section 14023, DPR is to consult with OEHHA regarding the need for, and appropriate degrees of, control measures with regard to pesticides identified as Toxic Air Contaminants (TAC), in this case chlorpyrifos.

DPR's proposed action relied upon the 2018 Chlorpyrifos Risk Characterization Document (RCD) in which developmental neurotoxicity was the critical health endpoint for chlorpyrifos exposures, and identified 0.01 milligrams per kilogram per day (mg/kg-day) as the point of departure. OEHHA agrees with the critical endpoint and the point of departure in the RCD, and supports DPR's use of the reference dose of 0.0001 mg/kg-day for aggregate exposure and the reference air concentration of 4.05 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) for acute 1-hour inhalation exposure.

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Based on the selected regulatory target dose and concentration, DPR found that additional control measures are necessary to achieve these levels, and that there is not any feasible mitigation available to reduce exposures below the selected target concentration and dose. Consequently DPR is preparing to cancel the registration of chlorpyrifos. Given DPR's findings, OEHHA concurs with this action in order to meet the requirements under the TAC program and protect public health.

OEHHA appreciates the opportunity to review and provide consultation on this RMD of chlorpyrifos. If you have any questions, please contact Dr. David Ting at 510-622-3226.

cc: David Ting, Ph.D.  
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Office of Environmental Health Hazard Assessment