



Department of Pesticide Regulation



Brian R. Leahy
Director

Edmund G. Brown Jr.
Governor

December 11, 2017

Dr. Michael Kleinman
Chairman, Scientific Review Panel
Department Of Medicine
University Of California, Irvine
100 Theory, Suite 100
Irvine, California 92697-1830

Dear Dr. Kleinman:

With the enactment of California's Toxic Air Contaminant Act, the Legislature created the statutory framework for the evaluation and control of chemicals, including pesticides, as toxic air contaminants (TACs) (Food & Agricultural Code §14021-14027). The statute defines TACs as air pollutants that may cause or contribute to increases in serious illness or death, or that may pose a present or potential hazard to human health. The Department of Pesticide Regulation (DPR) is responsible for evaluating pesticides as TACs.

The law defines specific steps DPR must follow for the identification, evaluation, and control of pollutants in ambient air in communities across California. One of those responsibilities is to extensively evaluate the potential adverse health effects of candidate pesticide TACs and estimate levels of exposure associated with their use. As such, in December 2015, DPR released a draft risk characterization document for chlorpyrifos that included data on health effects, potency, mode of action, and other biological factors. The December 2015 draft was peer-reviewed by the Office of Environmental Health Hazard Assessment (OEHHA) and the Air Resources Board (ARB). Based on the results of these reviews and other comments received by the registrant and stakeholders, DPR scientists released a revised draft risk assessment in August 2017 and presented their findings to the Pesticide Registration and Evaluation Committee in September 2017. This draft was then made available for public comment and has since been revised.

The next step in the evaluation of chlorpyrifos as a TAC is the peer review by the TAC Scientific Review Panel (SRP). The SRP must review the risk assessment to determine if it is seriously deficient based upon a review of the scientific data, the procedures and methods used to support the data, and conclusions.

The December 2017 Risk Characterization Document addresses potential human effects arising from exposure to chlorpyrifos from food, drinking water, air, and skin contact, as well as aggregate exposures from various combined scenarios. The SRP should focus its review on the inhalation portions of the assessment. The following documents are enclosed:



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- 1) Revised Draft Evaluation of Chlorpyrifos as a Toxic Air Contaminant (Risk Characterization Document)
- 2) DPR's charge questions to the SRP
- 3) Summarized technical comments received during the public comment period along with DPR's responses
- 4) DPR's responses to comments received from Dow AgroSciences LLC on the August 2017 draft Risk Characterization Document
- 5) DPR's responses to *toxicology* comments received from Dow AgroSciences LLC on the December 2015 draft Risk Characterization Document
- 6) DPR's responses to *exposure* comments received from Dow AgroSciences LLC on the December 2015 draft Risk Characterization Document

OEHHA's draft findings will be sent separately. Please contact me if you have any questions.

Sincerely,



Dr. Marylou Verder-Carlos
Assistant Director
916-445-3984

Enclosures

cc: Ms. Teresa Marks, DPR w/Enclosures
Dr. Cort Anastasio, SRP member w/Enclosures
Dr. Jesús Araujo, SRP member w/Enclosures
Dr. Paul Blanc, SRP member w/Enclosures
Dr. Alan Buckpitt, SRP member w/Enclosures
Dr. Stanton Glantz, SRP member w/Enclosures
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Dr. Peter Mathews, ARB w/Enclosures
Dr. David Siegel, OEHHA w/Enclosures
Dr. Melanie Marty, OEHHA w/Enclosures
Dr. John Faust, OEHHA w/Enclosures
Dr. David Ting, OEHHA w/Enclosures