



Department of Pesticide Regulation



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MEMORANDUM

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TO: Shelley DuTeaux, PhD MPH, Chief
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VIA: Eric Kwok, PhD DABT, Senior Toxicologist *[original signed by E. Kwok]*
Exposure Assessment Section

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DATE: February 28, 2019

SUBJECT: Response to Comments from the California Rice Commission on March 28, 2017,
Regarding the Propanil Exposure Assessment Document (Dated December 29, 2016)

I. Background

California Rice Commission (CRC) reviewed the Draft Risk Characterization Document (RCD) for Propanil dated December 30, 2016 prepared by the Human Health Assessment (HHA) Branch of the Department of Pesticide Regulation (DPR). The comments were detailed in a letter and summarized in an email, both dated March 28, 2017. As appropriate, comments were incorporated into the final Propanil RCD. This memorandum details HHA responses to specific comments from the CRC.

II. Response to Comments

General Response:

The comments from the CRC provided a detailed US and California specific regulatory history, as well as information on current manufacturers and formulations and assumptions used for occupational exposure scenarios. We appreciate the verification of the accuracy of the Product Formulations section of the draft RCD.

Specific Comments on Occupational or Residential Exposure

CRC Comment: The U.S. EPA has removed the human flagger from the assessment process, since that is no longer an industry practice... The global positioning satellites (GPS) and mapping systems have replaced human flaggers.

DPR HHA Response : HHA estimated flaggers' exposure based on the fact that although some product labels post prohibiting human flagging, other product labels do not specifically prohibit human flaggers. HHA provides exposure assessment for all legal uses.

CRC Comment: Rice is a highly-mechanized industry with no hand weeding in California rice fields. The only field worker could be an irrigator and most common when pesticides with long water holds are applied. The irrigator checks the rice box to repair leaks and also adjusts board when water is released. Propanil has an extremely short water hold of 7-days and REI of 24-hours. Irrigators usually stay on the levee and rarely step into the field.

DPR HHA Response: For post-application exposure scenarios, except scouting, HHA selected weeding rather than irrigation. Based on the US Environmental Protection Agency (U.S. EPA) ExpoSAC Policy 3 (US EPA, 2017), all irrigation transfer coefficients (TCs) are "0" (non-hand). Insufficient data were available to estimate irrigator exposure. As stated in the human exposure assessment for propanil (Appendix D, 2016 draft RCD), irrigator exposure can be characterized by scouter exposure. TCs are available for hand weeding. HHA agrees that weeding has been mechanized at large industrial farms. However, farmers in small farm settings may still weed by hand. HHA provides exposure assessment for all legal uses.

CRC Comment: We were involved with the last propanil reregistration at the U.S. EPA where the focus was worker exposure for mixers, loaders, and applicators (2003 and amended in 2006). The resulting mitigation was closed, or modified closed mixing and loading systems with closed cabs... Even with the additional mitigation for worker protection, the signal word remained CAUTION.

DPR HHA Response: In the US EPA Reregistration Eligibility Decision (U.S. EPA, 2006), exposures from all PPE levels, including baseline, minimum, maximum, and engineering control (with closed mix/load system) scenarios were estimated. The exposures estimated were not limited to closed mixing/loading systems. In addition, product labels do not state that the products must be mixed/loaded using closed systems. Only the pilot is required to be in a closed cab. HHA provides exposure assessment for all legal uses.

CRC Comment: The propanil drift issue was on the prune crop. No peach or other crop drift was documented. Therefore, the regulations specifically cite mitigation to prunes in the California Code of Regulations.

DPR HHA Response: Regulations used to control drift issues related to prunes do not address human exposure. This human exposure assessment estimates reasonable worst-case exposure under all legal uses of propanil.

III. References

DPR 2016. Propanil (N-(3,4-dichlorophenyl)propanamide) Risk Characterization Document. Principal author: Peter Lohstroh. Human Health Assessment Branch, Department of Pesticide Regulation, California Environmental Protection Agency. December 30, 2016.
http://www.cdpr.ca.gov/docs/risk/rcd/propanil_draft_watermark.pdf

U.S. EPA. 2006. Amendment to Reregistration Eligibility Decision (RED) for Propanil (March 2006) and the Propanil RED (September 2003). Docket ID: EPA-HQ-OPP-2003-0348. US Environmental Protection Agency, Office of Prevention, Pesticide, and Toxic Substances, Washington, DC. Available at
https://archive.epa.gov/pesticides/reregistration/web/pdf/propanil_red_combined.pdf.

U.S. EPA. 2017. Science Advisory Council for Exposure (ExpoSAC) Policy 3 (Revised January, 2017). US Environmental Protection Agency, Office of Pesticide Programs, Health Effects Division. Available at
https://www.epa.gov/sites/production/files/2016-12/documents/usepa-opp-hed_exposac_policy_3_january2017.pdf.