



Department of Pesticide Regulation

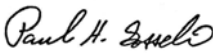


Mary-Ann Warmerdam
Director

MEMORANDUM

Arnold Schwarzenegger
Governor

TO: Jerry Campbell, Assistant Director
Pesticide Programs Division


FROM: Paul Gosselin
Chief Deputy Director
(916) 445-4000

DATE: April 6, 2007

SUBJECT: RISK MANAGEMENT DIRECTIVE FOR SULFURYL FLUORIDE

This memorandum outlines the Department of Pesticide Regulation's (DPR's) risk management decision related to the development of restrictions on the use of sulfuryl fluoride. The risk management directive represents a joint and mutual decision of DPR and the Office of Environmental Health Hazard Assessment as it relates to worker protection.

Summary

Currently there are two registered products in California containing sulfuryl fluoride; Vikane®, used for structural fumigation and non-food commodity fumigation; and ProFume®, used in post-harvest food commodity fumigation. In July 2006, DPR staff completed a risk characterization document (RCD) for sulfuryl fluoride in Vikane®. As part of the review and approval process, the RCD was subjected to the Toxic Air Contaminant Act and Birth Defects Prevention Act processes. This RCD addressed risks associated with (1) occupational exposures to those involved in structural and non-food fumigation practices, (2) bystander exposures to ambient and off-site air concentrations, and (3) residential exposures upon reentry into fumigated homes. In the completed RCD, staff identified scenarios where exposures to sulfuryl fluoride for acute, one-two weeks, seasonal, and/or chronic durations would pose health concerns. An addendum to the RCD to address the use of ProFume® is in development at DPR.

Based on the recommendations from the completed sulfuryl fluoride Vikane® RCD, please take appropriate steps to have staff initiate the development of regulatory measures to mitigate acute and repetitive exposures for workers, and acute exposures for residents and bystanders related to all structural and non-food commodity fumigations. Our mitigation efforts should ensure that acute exposures to sulfuryl fluoride do not exceed the 24-hour time-weighted average (24-hr TWA) reference concentrations of 2.57 ppm (10.7 mg/m³) for workers and 0.12 ppm (0.51 mg/m³) for bystanders and residents. The 24-hr TWA reference concentrations for repetitive exposures for workers are 0.48 ppm or 2.01 mg/m³ (1-2 weeks), 0.14 ppm or 0.60 mg/m³ (seasonal), and 0.04 ppm or 0.18 mg/m³ (chronic). A note should be made that the acute mitigation measures for bystanders and residents includes an additional uncertainty



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factor because a developmental neurotoxicity study has not been conducted and DPR has concerns about the neurotoxic effect of sulfuryl fluoride. Once the RCD addendum for ProFume® use is completed, a determination will be made on the need for mitigation. Finally, if you identify the need for additional data necessary for the mitigation process, you should utilize our reevaluation or registration authority (e.g., 1,3 dichloropropene) to require the registrants to supply necessary data.

If you have any questions, please contact me.

cc: Allan Hirsch, Chief Deputy Director
Office of Environmental Health Hazard Assessment

Victoria Hornbaker, Registration Branch, DPR

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bcc: Chuck Andrews
David Supkoff
Linda O'Connell