



Department of Pesticide Regulation



Paul E. Helliker
Director

MEMORANDUM

Gray Davis
Governor
Winston H. Hickox
Secretary, California
Environmental
Protection Agency

TO: Joseph P. Frank
Senior Toxicologist
Worker Health and Safety Branch

HSM-02039

FROM: Wendy Zhao
Staff Toxicologist (Specialist)
(916) 332-7619

DATE: October 22, 2002

SUBJECT: RESPONSE TO COMMENTS ON ATRAZINE EXPOSURE ASSESSMENT
DOCUMENT (HS-1636)

On May 11, 2001, the Office of Environmental Health Hazard Assessment (OEHHA) provided comments to Dr. Gary Patterson of the Medical Toxicology Branch on the Department of Pesticide Regulation's (DPR) draft risk characterization document (RCD) for the active ingredient atrazine. In the same memorandum, OEHHA provided comments on the atrazine exposure assessment document (HS-1636) suggesting that seasonal and short-term exposures be estimated for handlers.

After reviewing the comments from OEHHA, the Worker Health and Safety Branch (WHS) agrees that the seasonal exposure and short-term upper-bound exposure should be considered in the exposure assessment of atrazine. This is consistent with current WHS practices regarding exposure assessment and will be considered during the mitigation process.

Recently, the United States Environmental Protection Agency (U.S. EPA) issued the revised Reregistration Eligibility Decision Document (RED, U.S. EPA, 2002). The occupational handler exposure assessments and the margins of exposure (MOEs) were evaluated. For short-term (one to 30 days) exposure, there were ten scenarios before mitigation (baseline) (i.e. long pants, long sleeved shirt, no gloves, open mixing/loading, open cab tractor for groundboom application, and open flagging) where dermal risk estimates had MOEs less than 100. When personal protective equipment (PPE) (i.e. open mixing/loading, double layer of clothing, chemical resistant gloves) was used, all but five short-term handler exposure scenarios had MOEs greater than 100. For Intermediate-term (30 days to six months) exposure, most of the baseline dermal risk estimates had MOEs less than 100, nearly all of the inhalation exposure risk estimates had MOEs greater than 100 without a respirator. There was one of the intermediate-term combined route applicator risk estimates that had a MOE less than 100 with PPE. As stated above, the MOEs in some scenarios were unacceptable. WHS will process the evaluation after the U.S. EPA finalize mitigation document.



Joseph P. Frank
October 22, 2002
Page 2

Reference:

U.S. EPA. 2002. Atrazine: Revised Occupational and Residential Exposure Assessment and Recommendations for the Reregistration Eligibility Decision Document. Office of Prevention, Pesticide and Toxic Substances, United States Environmental Protection Agency, Washington, D.C. 20460. April 25.