California Environmental Protection Agency
James M. Strock, *Secretary for Environmental Protection*

State of California
Pete Wilson, *Governor*

OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT
Steven A. Book, *Interim Director*

MEMORANDUM

TO: Larry L. Nelson, Ph.D., Chief
Medical Toxicology Branch
Department of Pesticide Regulation
1220 N Street
Sacramento, CA 94271-0001

FROM: Hazard Identification and
Risk Assessment Branch
2151 Berkeley Way, Annex 11
Berkeley, CA 94704
(510) 540-3063

DATE: October 7, 1991

RE: Final Bifenthrin Risk Characterization Document

Thank you for your recent letter responding to the comments submitted by the Office of Environmental Health Hazard Assessment (OEHHA) on the California Department of Pesticide Regulation's (DPR) risk characterization document for bifenthrin. Although many of the concerns were addressed, OEHHA still believes that the risk characterization document is incomplete. Some of these comments may have applications beyond the bifenthrin risk characterization document.

The main concern of OEHHA is about the neurotoxicity of bifenthrin. The exact mechanism of action for bifenthrin neurotoxicity is not known and it should be discussed as a source of uncertainty in the document. This is especially important because concurrent exposure to other synthetic pyrethroids, which may have a similar mechanism of action, is possible. Consequently, public health risk from exposure to pyrethrin-like neurotoxicants may be much higher than expected.

The following are some generic issues relating to the bifenthrin risk characterization document.

1. It would be useful if the document contained an appendix providing more details on carcinogenic risk assessment such as: equations, extrapolation factors, and assumptions used by CDPR in deriving cancer potency factors.

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2. CDPR should provide in the main document a rationale for and supportive data for disregarding inhalation as a route of bifenthrin exposure.

3. Mitigation measures recommended by CDPR to reduce worker exposure to bifenthrin (and often to other chemicals) include the requirement of wearing additional protective clothing and increasing the re-entry intervals. These measures can work only if they are enforced. Please, provide us with a description of your enforcement program specifically as it relates to the use of bifenthrin, and with any records on its effectiveness.

If you have any questions concerning these comments, please contact me or Dr. Michael DiBartolomeis at ATSS 8/571-3063

Richard J. Jackson, M.D., M.P.H.
Chief

cc: Steven A. Book, Ph.D.
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