CASWELL FILE

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

AUG 3 1989

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: DEF, Review of a Protocol for a 90-day Delayed Neurotoxicity Study by the Dermal Route

TO: Robert Taylor PM-25
Registration Division (H7505C)

FROM: Robert P. Zendzian Ph.D.,
Acting Head, Rev Sec I
Toxicology Branch I
Health effects Division (H7509C)

THROUGH: Edwin Budd
Acting Chief
Toxicology Branch I

Compound; DEF | Tox Chem #864 | Registrant; Mobay

Registration #3125-282 | Accession #N/A | Tox Project #9-1828 & 9-1763

Action Requested

Review the following protocol;

Subchronic delayed neurotoxicity study with technical grade tribufos (DEF®) in hens, Protocol for study No. 89428-CS, Mobay, Agricultural Chemicals Division, undated.

Discussion and Conclusion

The proposed protocol for a dermal delayed neourotoxicity study is acceptable. The Registrant is advised to test the dermal dose of the postitive control (TOCP) during the range-finding study. I have no information as to what is an effective dermal dose of TOCP. Since the Registrant proposes to start the study on Aug 7, 1989, I have advised the Registrant of my conclusions by phone on Aug 2, 1989

The Registrant proposes to perform a Guideline Subchronic Delayed Neurotoxicity Study (82-5) by the dermal route (application to the comb) rather than the oral route as described in the Guideline. A range-finding study will be performed to determine the doses for the main study. The major route of exposure to DEF is dermal and there are major differences in the metabolism and toxicity of the compound by oral and dermal routes. The proposed application site has been shown to be effective by Abu-Donia. The rationale is sound and the protocol is acceptable.

Protocol