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

OCT 3 1990

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MEMORANDUM

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

SUBJECT: Chlorpyrifos - Additional Data Provided for a 4-Day Dermal Probe and a 21-Day Dermal Toxicity Study in Fischer 344 Rats (MRID No. 409728-01) and Mechanistic Information

Caswell No. 219AA
HED Project No. 0-0755
Identifying No. 62719-15

FROM: Elizabeth A. Doyle, Ph.D. E.A. Doyle 9/25/90
Review Section I, Tox Branch II (HFAS) (H7509C)

TO: J. Edwards, PM74
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THRU: Yiannakis M. Ioannou, Ph.D., Section Head
Review Section I, Tox Branch II (HFAS) (H7509C) Y.M. Ioannou 9/25/90

and

Marcia van Gemert, Ph.D., Branch Chief
Tox Branch II (HFAS)
Health Effects Division (H7509C) Marcia van Gemert 10/1/90

Registrant: Dow Chemical U.S.A.

Action Requested: The registrant has provided data that were requested in the subject DER to permit completion of the review of the 21-Day Dermal Toxicity and 4-Day Dermal Probe studies (MRID No.409728-01). In addition, the registrant has provided a review detailing the mechanism of action of chlorpyrifos, "Chlorpyrifos: Biochemical Basis for Safety" by R. J. Richardson (MRID No. 413402-04).

Recommendations: Tox Branch II acknowledges receipt of the mechanistic paper on chlorpyrifos activity with respect to organophosphorus-induced delayed neuropathy and would like to thank the registrant for the information.

The data provided in MRID No. 413402-01 are considered satisfactory to fulfill the stated deficiencies described in the DER for MRID No. 409728-01 as "The Registrant is requested to provide data concerning the results of homogeneity, concentration and stability of the test article dosing solutions." Tox Branch recommends that the classification for the 21-Day Dermal Toxicity Study be changed to **Core - Guideline.**