

SHAUGHNESSEY NO.
059101

REVIEW NO.

EEB BRANCH REVIEW

DATE: IN 7-16-84 OUT 8-29-84

FILE OR REG. NO. 464-448/464-523

PETITION OR EXP. PERMIT NO. _____

DATE OF SUBMISSION 6-28-84

DATE RECEIVED BY HED 7-13-84

RD REQUESTED COMPLETION DATE 9-11-84

EEB ESTIMATED COMPLETION DATE 9-3-84

RD ACTION CODE/TYPE OF REVIEW 575/Amended registration

TYPE PRODUCT(S): I, D, H, F, N, R, S Insecticide

DATA ACCESSION NO(S). 253708

PRODUCT MANAGER NO. Ellenberger/Comfort (12)

PRODUCT NAME(S) Chlorpyrifos

COMPANY NAME Dow

SUBMISSION PURPOSE Review Modeling the runoff and behavior of
chlorpyrifos in a terrestrial-aquatic watershed

SHAUGHNESSEY NO. CHEMICAL, & FORMULATION % A.I.

Chlorpyrifos

Pesticide Name Chlorpyrifos

100 Submission Purpose

Data submission of an aquatic field residue monitoring and modeling study.

101 Hazard Assessment

101.4 Adequacy of Toxicity Data

The study was reviewed but not validated. Weaknesses of the study include the site selection and previous contamination. The highest level observed in the pond water was approximately 0.3 ppb which dissipated with a half-life of about 3 days. Concentrations of chlorpyrifos in pond sediment peaked at approximately 10 ppb. The levels of chlorpyrifos reported are indicative of potential hazard to aquatic organisms in waters receiving runoff from large agricultural areas. [*G. Lacustris* 96-hr LC₅₀ = 0.11 ppb which is below the 0.3 ppb level reported].

103 Conclusions

The study submitted (Acc. No. 253708) may partially fulfill the Guidelines requirement for an acceptable aquatic field monitoring study requested in the Chlorpyrifos Registration Standard for agricultural crops. An additional study is needed which should also include population monitoring of sensitive aquatic organisms. Additional guidance regarding this study should be sought from the Ecological Effects Branch.

Note: The submitted study (Acc. No. 253708) should be forwarded to the Exposure Assessment Branch for formal validation. Information on the usefulness of the proposed model for extrapolating to larger field situations should be provided to EEB from EAB.

Les Touart
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9-5-84

Fisheries Biologist, Sec. 4

Henry T. Craven 9-6-84
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