183302 RECORD NO.

128825 SHAUGHNESSY NO.

REVIEW NO.

EE BRANCH REVIEW

DATE: IN11-05-86	OUT 10-06-87
FILE OR REG. NO. 279-3055	
PETITION OR EXP. PERMIT NO	
DATE OF SUBMISSION_	09/15/86
DATE RECEIVED BY HED_	10/23/86
RD REQUESTED COMPLETION DATE_	01/05/87
EEB ESTIMATED COMPLETION DATE	12/29/86
RD ACTION CODE/TYPE OF REVIEW	305
TYPE PRODUCT(S): I, D, H, F,	N, R, S Insecticide
DATA ACCESSION NO(S). 265012	
PRODUCT MANAGER NO. G. LaRocca(15)	
PRODUCT NAME(S) Bifenthrin	
COMPANY NAMEFMC Corporation	
SUBMISSION PURPOSE Submission of Daphnia magna life cycle	
study with raw data	
SHAUGHNESSY NO. CHEM	ICAL & FORMULATION % A.I.
128825 bif	enthrin



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

OFFICE OF PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

TO:

George LaRocca, PM (15)

Registration Division (TS-767)

FROM:

Fisheries Biologist Les Touart,

Section 1

THRU:

THRU:

Raymond Matheny, Head (laymond W. Mathery 10/6/87 Section 1

Henry T. Craven, Acting Chief Henry T. Craven
Ecological Effects Branch

Hazard Evaluation Division (TS-769)

SUBJECT:

Reevaluation of Daphnia magna life cycle study after

submission of raw data

The classification of this test as supplemental is affirmed after review of the raw data. This study was reviewed 7/30/85 and determined to be supplemental and repairable to core after review of the raw data to allow confirmation of statistical analyses. The raw data were used to evaluate bifenthrin effects on life-cycle parameters and effects on cumulative number of young per female were statistically significant at the two lowest test concentrations. Therfore, a no observable effect level has not been demonstrated for bifenthrin. With the lowest test level at 0.00095 ppb (measured), bifenthrin poses a serious toxicological threat to aquatic invertebrates which can be anticipated at virtually any exposure. No safe level is demonstrated by the available data.

The DER of this study suggests that reproductive impairment occurred at the lowest level tested (0.00095 ppb), and the raw data statistically confirm (alpha = 0.05) that such impairment did occur.