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10-30-75

(3)

EEE BRANCH REVIEW

DATE: IN \_\_\_\_\_ OUT \_\_\_\_\_ IN 10/8/75 OUT 10/30/75 IN \_\_\_\_\_ OUT \_\_\_\_\_  
FISH & WILDLIFE ENVIRONMENTAL CHEMISTRY EFFICACY

FILE OR REG. NO. 707-75

PETITION OR EXP. PERMIT NO. \_\_\_\_\_

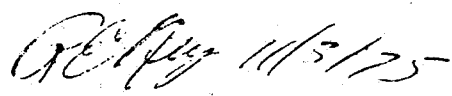
DATE DIV. RECEIVED 10/1/75DATE OF SUBMISSION ECID Not necessary

DATE SUBMISSION ACCEPTED \_\_\_\_\_

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

PRODUCT MGR. NO. R. Taylor (25)PRODUCT NAME(S) Stam F-34 and Stam GX-4COMPANY NAME Kohn & Haas CompanySUBMISSION PURPOSE RICE - CALIFORNIACHEMICAL & FORMULATION 3',4'-dichloropropionanilide (propanil)

- 1.0 Introduction
- 1.1 Other names: Stam
- 1.2 Propanil is a herbicide used on rice.
- 1.3 See environmental chemistry review of 2/27/74.
- 1.4 A hydrolysis study and other environmental chemistry studies were requested in our review of 4/5/72.
- 1.5 A hydrolysis study was submitted with Rohm and Haas letter of 9/24/75.
- 2.0 Discussion of Data
- 2.1 Hydrolysis of Propanil in Water as a Function of pH
- Ring labelled propanil was added to buffered aqueous solutions of pH 5.1, 7.2 and 8.8 and maintained 28 days at ca. 25°C. Samples were taken periodically, assayed for radioactivity and analyzed by TLC.
- At pH 5.1 over 56% of original propanil was hydrolyzed to 3,4-dichloroaniline in 28 days. No other products were observed. At pH 7.2 and 8.9, 99% activity was present as propanil in 28 weeks.
- TCAB, 3,4,3'4'-tetrachloroazobenzene was not detected.
- Conclusions:
- (1) Propanil is stable in neutral and alkaline aqueous solutions and hydrolyzes to 3,4-dichloroaniline under acidic conditions (pH 5.1).
- (2) The azo compound, TCAB, was not detected under conditions of the study.
- 3.0 Recommendation
- 3.1 The data submitted satisfy our request for hydrolysis studies made in the review of 4/5/72.

  
Ronald E. Hey, Jr.

10/30/75

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10/29/75