

US EPA ARCHIVE DOCUMENT



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

**JUL 18 1983**

Memorandum

OFFICE OF  
PESTICIDES AND TOXIC SUBSTANCES

To: W. Miller, Product Manager  
Team #16, RD

Thru: Raymond W. Matheny, Head *RWM*  
Section #1  
EEB/HED

Thru: Clayton Bushong, Chief *CB*  
EEB/HED

Subject: Corrections to 10/1/81 EEB review and 2/9/82 and 5/26/82  
memoranda on propetamphos (Safrotin EC); Reg. No. 11273-22

A 3/16/79 EEB review for "San 326 10G Insecticide" (11273-EUP-RL), with data validation sheets, has been located within EEB's file for the chemical propetamphos (Shaughnessy #113601). Due to this mis-filing, data on this material were inadvertently incorporated into EEB's 10/1/81 review of propetamphos. ("San 326 10G" is more toxic to birds, fish and aquatic invertebrates than propetamphos, based on available data). The 10/1/81 review and above memoranda on file at EEB have been amended to account for this finding.

As a result of this finding, please note that a "core" coldwater fish LC<sub>50</sub> is not available for propetamphos. The available study on technical material with the rainbow trout was considered "supplemental" by the reviewer (S. Hopkins) because only one partial mortality of 60% occurred at the highest test level (1000 ppb), preventing the use of the moving average or probit method for LC<sub>50</sub> calculation. No mortality was reported at 560 ppb or below. (No weaknesses in the testing methodology were cited other than an assumed inadequate range of toxicant concentrations due to the lack of multiple partial mortalities). The "core" bluegill LC<sub>50</sub> cited by S. Hopkins is 188 (144-244) ppb. In contrast to the trout study, 100% mortality was reported at 560 ppb. Hence, it appears that the bluegill is clearly the more sensitive species and thus that the bluegill LC<sub>50</sub> will be sufficient for hazard evaluation purposes. However, aquatic toxicologist D. Coppage of EEB indicates that it is possible that a re-test of the rainbow trout could produce an LC<sub>50</sub> below that of the bluegill and that a decision on whether such a re-test is necessary for hazard evaluation purposes will depend on the use pattern, which includes the application rate for the proposed use in a 6-10' band around buildings (personal communication, 7/8/83).

As is noted in the 10/1/81 EEB review and subsequent memoranda, a hazard assessment for the proposed use pattern will require both application rate and environmental fate information. Depending on environmental fate information, chronic testing may also be needed for hazard assessment, as noted in the 2/9/82 memorandum.



James D. Felkel  
Wildlife Biologist  
Section #1, EEB/HED