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SHAUGHNESSEY NO.

REVIEW NO.

EEB REVIEW

DATE: IN 3-21-88 OUT 4-8-88

FILE OR REG. NO 239-2452

PETITION OR EXP. NO. _____

DATE OF SUBMISSION 3-11-88

DATE RECEIVED BY HED 3-17-88

RD REQUESTED COMPLETION DATE 4-18-88

EEB ESTIMATED COMPLETION DATE 4-18-88

RD ACTION CODE/TYPE OF REVIEW 177

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

DATA ACCESSION NO(S). _____

PRODUCT MANAGER NO. W. Miller (16)

PRODUCT NAME(S) (Methamidophos) Monitor

COMPANY NAME Chevron Chemical Co.

SUBMISSION PURPOSE Submission of Terrestrial
Field Study Protocol for Review

SHAUGHNESSEY NO.	CHEMICAL, & FORMULATION	% A.I.
_____	_____	_____
_____	_____	_____
_____	_____	_____
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Chemical Name: Methamidophos (Monitor)

100.0 Purpose of Submission

The Registrant has submitted protocols for conducting two Level I avian field studies to satisfy the Amended Reregistration Standard on methamidophos. The titles of the studies submitted are:

" Monitor 4 Liquid Insecticide: An Evaluation of its Effects upon Birds and Other Wildlife On and Around Cabbage Fields in East-Central Wisconsin. Wildlife International Protocol No. 149/011888/CFWI/JBPI. January 18, 1988.

" Methamidophos: An Evaluation of its Effect upon Birds and Other Wildlife On and Around Cotton Fields in Barbour County, Alabama. Wildlife International Protocol No. 162/011388/TBW3/CHT3. January 13, 1988

The Registrant plans to begin conducting the studies in early June and would appreciate a protocol review as soon as possible. In order to meet this time frame the Registration Division has requested the EEB to conduct a cursory review to determine if there are any glaring deficiencies with the protocol that would be of concern to the Branch.

101.0 Protocol Description

Each protocol describes a one year field screening study designed to evaluate the effects of methamidophos on wildlife species. The objectives of the protocol are:

1. to determine the species of birds and small mammals in and around the treated area.
2. To assess treatment related mortality
3. To determine environmental concentrations .

102.0 Protocol Evaluation

At the request of the Registration Division, the EEB has completed an expedited review of the submitted protocols and believes that the following comments are appropriate:

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With regards to site location, site description, number of study plots and numbers of replicates, and wildlife species identification, the design appears adequate to meet the objectives of the study. In addition, the residue sampling portion of the study, while not sufficiently replicated, appears to be adequate to provide enough data on what typical residues are likely to occur.

The EEB is concerned, however, with the carcass search portion of the protocol. Obviously, this aspect of the study is critical to determining whether or not mortality has occurred. It appears that this component of the study design is concerned more with the amount of time spent searching the various habitat types (i.e., the field interior, perimeter or adjacent habitat) than with the amount of area, given bird density, that needs to be searched in order to find dead birds. The EEB doubts that this approach, while it may locate some dead birds, is rigorous enough to provide a "true" picture of the magnitude of the effects. (Note: The EEB refers to the DREAP formula for providing guidance along these lines of investigation. The EEB stresses the importance of conducting a good census to estimate avian densities prior to conducting the study. The EEB realizes that density estimates will vary considerably on each treated plot, however, if a range can be established, against which to make comparisons, it would be sufficient to determine how much of the study area needs to be searched to detect an impact-as defined by the Guidance Document).

102.0 Summary

The EEB has completed an expedited review of two protocols, submitted by Chevron Chemical Company, for conducting Level I field studies to satisfy Reregistration Standard data requirements for the use of methamidophos on cabbage and cotton. It is EEB's opinion that the carcass search portion of these protocols is not rigorous enough to provide a "true picture" of the magnitude of potential effects (e.g., acute mortality) from these use patterns.

As a courtesy to the Registrant, the EEB telephoned Mr. Frank Kaminsky, Field Study Coordinator for Chevron Chemical Company, and informed him about our review comments (see attached telephone conversation record). Mr. Kaminsky will contact Wildlife International, Inc. and inform them of EEB's conclusions. Hopefully, the carcass search issue can be resolved before it becomes too late in the field season to conduct the study.

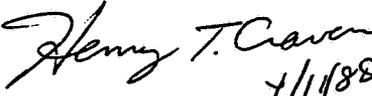
The EEB cautions that the comments included herein are not comprehensive in nature and, pending a formal review and subsequent peer review by the Terrestrial Field Studies Committee, are subject to revision and/or modification.

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6/25/81
10/1/81


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