



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

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OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

OCT 6 1987

MEMORANDUM

SUBJECT: EPA Reg. No.: 476-2178. Phosmet.
Protocols for Residue Monitoring Studies.
RCB No.: 2798. MRID No.: None.

FROM: Maxie Jo Nelson, Chemist
Tolerance Petition Section I
Residue Chemistry Branch
Hazard Evaluation Division (TS-769C) *mjn*

THRU: Robert S. Quick, Section Head
Tolerance Petition Section I
Residue Chemistry Branch
Hazard Evaluation Division (TS-769C) *by mjn*

TO: George T. LaRocca, PM 15
Insecticide-Rodenticide Branch
Registration Division (TS-767C)

By transmittal letter dated September 9, 1987, Stauffer Chemical Company, registrant of products (Imidan®) containing phosmet as active ingredient, has submitted the following:

1. A protocol for Agency review entitled: "IMIDAN 50% WP: A Residue Monitoring Study In Alfalfa In Central California To Assess Exposure To Avian Species Under Standard Agricultural Use Conditions", ID# 144/081387/alfalfa/DBTER1, August 13, 1987;
2. A protocol for Agency review entitled: "IMIDAN 50% WP: A Residue Monitoring Study In Pears In Central Washington State To Assess Exposure To Avian Species Under Standard Agricultural Use Conditions", ID# 144/083187/pears/CMTER, August 31, 1987;

3. A protocol for Agency review entitled: "IMIDAN 50% WP: A Residue Monitoring Study In Oranges In Southern California To Assess Exposure To Avian Species Under Standard Agricultural Use Conditions", ID# 144/081287/oranges/DBTER1, August 12, 1987;
4. Analytical methodology entitled: "Determination Of Phosmet And Phosmet Oxygen Analogue In Soil By Gas Chromatography", by Y. Iwata, April 24, 1986, ID# RRC 86-46; and,
5. An analytical method entitled: "Determination of Residues of IMIDAN® and IMIDAN® Oxygen Analog", B. J. Adelson, J. C. McKay, and G. W. Schwab, June 19, 1973, ID# WRC 73-43, to be used for the determination of residues in crops.

Discussion

These protocols each describe a single season field or orchard residue monitoring study of phosmet applied at maximum label use rates and frequencies in alfalfa fields, pear orchards, and orange groves, respectively.

The objectives of these studies are to assess exposure of avian species to phosmet (Imidan® 50% WP) by measuring residues of phosmet (and its oxygen analogue) in avian and mammalian food items, including treated crop [(1) foliage and (2) flowering or fruit producing parts], non-target vegetation (fruits, seeds, inflorescences, and leaves), soil, water, and invertebrates (including insects and earthworms) in and around treated fields or orchards/groves. Also, any vertebrates (birds or small mammals) found dead or moribund on, or adjacent to, the treatment areas will be noted and, if possible, collected.

The registrant states the experimental design and analytical methods which are to be used in these studies are designed to comply with the Pesticide Assessment Guidelines, Subdivision E.

Subdivision E Guidelines pertain to "Hazard Evaluation: Wildlife and Aquatic Organisms".

§ 71-5 of Subdivision E deals with simulated and actual field testing for mammals and birds; subpart (d)(2) is specific for acceptable protocols for "actual field studies for hazard to wildlife".

Conclusion

The review of these protocols falls within the purview of the Ecological Effects Branch (EEB), HED.

Since these studies do not fall within Subdivision O (Residue Chemistry) of the Pesticide Assessment Guidelines, it is not germane for RCB to comment upon them.

Recommendation

The PM should forward this submission of the registrant to EEB for the appropriate review and comment.

cc: RF, Circ, Reviewer (M. Nelson), PM#15, Phosmet Registration
Standard, EEB, PMSD/ISB (Eldridge).
TS-769C:RCB:Reviewer(MJN):CM#2:Rm804:557-7484:typist(mjn):10/5/87.
RDI:SectionHead:RSQuick:10/5/87:DeputyChief:RDSchmitt(byKHArne):
10/5/87.