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White - Data Coordinator Yellow - Data Review Section Pink - PM/RM/DCI Green - Return with completed review

3

REVIEW OF PROTOCOL FOR SMALL-SCALE RETROSPECTIVE GROUND-WATER MONITORING STUDY

1. CHEMICAL:

Chemical name: N-(2,6-Dimethylphenyl)-N-(methoxyacetyl)-alanine methyl

ester

Common name:

Metalaxyl

Trade name:

Ridomil, Subdue, Apron, Proturf

Structure:

CH₃ CH—COOCH₃

2. TEST MATERIAL:

Not Applicable.

3. STUDY/ACTION TYPE:

Review proposed protocol for small-scale retrospective ground-water monitoring study.

4. STUDY IDENTIFICATION:

Title:

Small Scale Retrospective Study for Metalaxyl in Ground-

Water- Protocol.

Author(s):

Roux Associates

The Huntington Atrium 775 Park Avenue, Suite 255 Huntington, New York 11743

Submitted for: Agricultural Division

Ciba-Geigy Corporation Post Office Box 18300 Greensboro, NC 27419

Identifying No.:

100-628

Action Code:

177

Accession Number: not given Record Number:

242077

Date Sent to EFED: 3/21/89

5. REVIEWED BY:

Elizabeth Behl

Signature:

Hydrogeologist Consultant to

OPP/EFFD/EFGWB/Ground-Water Section

Date:

6. APPROVED BY:

n Patrick W. Holden Chief Signature:

: _ Henry

OPP/EFED/EFGWB/Ground-Water Section

7. CONCLUSIONS:

The data package is incomplete, and therefore, cannot be fully screened to complete the review of this protocol for the small-scale retrospective ground-water monitoring study. Three monitoring sites are proposed representing tobacco, citrus, and lettuce crops. The protocol asserts that the justification of the selection of the monitoring sites is contained in "the Sensitivity Analysis and Preliminary Site Selection reports that accompany this protocol" (p. 5, last sentence). Neither of these reports have yet been submitted to EPA. This information is required in order to approve the number and location of the monitoring sites. As per conversation with Mario Fiol (RD, 4/24/89) and Karen Stumpf (Ciba-Geigy, 4/25/89) these reports will be remitted to EPA as soon as possible.

The protocol is being returned. We are retaining a copy of the protocol in our EFGWB files for easy access in the future. When the registrant submits the above reports the protocol can be fully screened.

8. RECOMMENDATIONS:

1) The registrant should submit the ground water monitoring study protocol and all reports necessary to enable the reviewer to assess the protocol.

9. BACKGROUND:

Metalaxyl is a systemic fungicide registered since 1979 for use on over 100 agricultural crops, ornamentals and turf. Some principle uses are tobacco, ornamentals, turf, fruit, citrus, non-bearing nursery stock, seed treatment, vegetables and peanuts. It is applied to soil or foliage at rates ranging from 0.135 to 8.0 # a.i./acre. Methods of application include: foliar application, soil application (broadcast or band), drenching, sprinkler or drip irrigation, and soil mixing.

Metalaxyl is moderately stable to hydrolysis and photodegradation under normal environmental conditions. Results of laboratory and field leaching studies indicate that both the parent and the primary degradate (CGA-62826) can leach in most soils (Metalaxyl Registration Standard [FRSIR], 7/9/87). Tests indicate that metalaxyl is not oncogenic, mutagenic, or teratogenic, and that acute toxicity is low (memo: Barbehenn to Rossi, 7/17/87).

Metalaxyl has been reported in ground water in Florida and North Carolina, according to EPA's Pesticides in Ground Water Database (4/19/89). Data submitted to EPA for review are inadequate to determine leaching potential, yet laboratory studies indicate that the parent and major degradate can rapidly leach. Therefore, a small-scale retrospective ground-water study was required (Metalaxyl Registration Standard [FRSIR], 7/9/87).