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

APR 11 1994

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: **Pendimethalin Reregistration.** Re-evaluation of Previously Reviewed Confined Rotational Crop Study (MRID 41806801).

CBRS No.: 12685
DP Barcode No.: D195941
MRID No.: no new data
Chemical No.: 108501
Reregistration Case No.: 0187

Bonnie Cropp-Kohlligian

FROM: Bonnie Cropp-Kohlligian, Environmental Scientist
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THRU: Paula A. Deschamp, Section Head
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Paula A. Deschamp

TO: Lois Rossi/Walter Waldrop [PM 71]
Reregistration Branch
Special Review and Reregistration Division [7508W]

In response to the 1990 Pendimethalin DCI, American Cyanamid Company previously submitted a confined rotational crop study (Guideline No. 165-1) entitled, "Pendimethalin (CL 92,553): Confined Accumulation Studies of Carbon-14 Labeled CL 92,553 in Lettuce, Wheat, Carrots, Radishes, and Snap Beans as Representative Rotational Crops (Princeton, New Jersey)" (1991;MRID 41806801). These data were reviewed in detail by the Environmental Fate and Groundwater Branch of the Environmental Fate and Effects Division (EFGWB/EFED) and



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deemed inadequate but upgradeable pending further characterization/identification of the radioactive residues of pendimethalin found in soil and crops (Data Evaluation Record approved by H. Manning of EFGWB/EFED). However, the registrant subsequently informed the Agency that it would not be possible to upgrade the subject study since the necessary samples had not been retained (letter from B. Gingher of American Cyanamid Company to L. Rossi of SRRD dated 2/27/92) and requested a waiver from the need to provide any additional confined rotational crop data. The data waiver request was considered by the Graybeard Committee and denied. Since CBRS/HED had assumed responsibility for the review of rotational crops studies sometime after the initial review of the subject data by EFGWB/EFED, a representative of CBRS/HED concluded that additional pendimethalin confined rotational crop data were required and provided that input to the Graybeard Committee decision to deny the waiver request. [Note: CBRS did not object to the concomitant time extension request to repeat the confined rotational crop study with a due date of 2/24/94.]

In response to the current request by the registrant (letter from Z. Ahmed of American Cyanamid Company to J. Mitchell of SRRD dated 10/8/93) to once again consider the need for additional confined rotational crop studies, CBRS has reexamined the subject data in light of recent guidance issued by the Agency (Guidance on How to Conduct Studies on Rotational Crops issued by CBRS and CBTS of HED 2/24/93) and concurs with previous Agency conclusions reached by EFGWB/EFED and the Graybeard Committee that the subject pendimethalin confined rotational crop study (1991; MRID 41806801) is inadequate to fulfill data requirements.

Based on the subject data, CBRS expects that [¹⁴C]Pendimethalin residues will accumulate (>0.01 ppm) in all rotational crops planted 30-365 days after an initial treatment of soil at the maximum registered use rate; however, due to inadequate characterization/identification of radioactive residues in the study, CBRS is unable to determine appropriate plant back intervals or decide if limited/extensive field rotational crop studies will be required in order to establish rotational crop tolerances.

CONCLUSIONS/RECOMMENDATIONS

The registrant must submit a new confined rotational crop study conducted on three representative crops (small grain, leafy vegetable and root crops) using [¹⁴C]Pendimethalin uniformly radiolabeled in the ring position. For additional guidance, the registrant is advised to consult Agency publications entitled, "Guidance on How to Conduct Studies on Rotational Crops" (2/24/93) and "Additional Guidance for Conducting Plant and Livestock Metabolism Studies" (7/16/92).

cc: BLCKohlligian (CBRS), Pendimethalin Reg. Std. File, Pendimethalin SF, RF, Circulate.

RDI: PDeschamp:4/7/94

MMetzger:4/7/94

EZager:4/8/94

7509C:CBRS:BLCKohlligian:CM#2:Rm 805B:703-305-7462:4/7/94.