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

FEB 5 1988

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: EPA Reg. No. 279-3053. Command® 4 EC on fallow cropland with a follow-up planting of winter wheat. No MRID No. RCB No. 3131.

FROM: Linda S. Propst, Chemist
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Hazard Evaluation Division (TS-769)

Linda S. Propst

THRU: Andrew R. Rathman, Section Head
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Residue Chemistry Branch
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TO: Robert J. Taylor, PM 25
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Background

The Agricultural Chemicals Group, FMC Corporation was granted a two year EUP on August 14, 1985 for the evaluation of Command® 6 EC (common name, dimethazone) on fallow cropland.

RCB deferred to EAB (L. Propst memo, 8/2/85) about residues remaining in the soil at the time of planting the subsequent crop. If there were no residues remaining in the soil at the time of planting the subsequent crop, RCB would consider this to be a non-food use and would have no objections to the proposed EUP. If there were residues in the soil, this would be considered a food use and would require tolerances for residues in the subsequent crop.

Data available in the Exposure Assessment Branch files show that the application of ^{14}C-dimethazone at the rate of 2 lb ai/A results in low residues in rotational crops (corn, oat, cabbage, and sugar beet) planted 10 months after chemical application. A majority of these residues are either plant tissue bound or polar. Organosolubles accounted for less than 0.02 ppm. Residues were higher in the mature rotational crops as compared to the immature ones. Total radioactivity did not exceed 0.063 ppm in corn, cabbage,

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or sugar beet, but reached a maximum of 0.118 ppm in mature oat straw (Samuel Creeger memo, 7/2/85). On the basis of these data EAB allowed a 10 month crop rotation restriction since the plant incorporated activity was of no concern to them.

Present Consideration

The registrant now requests that the Agency allow for Command® 4 EC to be applied to fallow cropland at the rate of 3/4 lb. a.i./A to 1.0 lb. a.i./A. Applications would be made from the late summer through the autumn months. After application, the land would lie fallow until the fall of the following year, at which time, winter wheat would be planted. The label restricts planting wheat sooner than 9 months after a late summer or fall application. Livestock are not allowed to graze on treated fields.

For further clarification, the registrant explained that if fallow cropland is treated in September of 1987, it would lie fallow until the planting of winter wheat in the autumn of 1988, with harvest during mid-summer 1989. The timing between application and the planting of the winter wheat is, at a minimum, 9 months, the same as the currently accepted crop rotation statement. The label further specifies an 18 month fallow period in areas where spring wheat is planted.

There was no submission of residue data.

Conclusions and Recommendations

There are no data available in our files reflecting residues of dimethazone occurring in wheat which has been treated as proposed. However, no residues of dimethazone have been found in rotational crops planted 10 months after chemical application. Therefore, RCB will not require a tolerance to cover this use.

RCB recommends for the proposed amended registration.

cc: Reading File, Subject File, Reviewer, Circulation, EAB, NF use F
PMSD/ISB
RDI: A. R. Rathman, 2/4/88; R. D. Schmitt, 2/4/88
TS-769:RCB:LSP:lsp:CM-2:Rm803C:557-7324:2/4/88

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