To: Robert Taylor  
Product Manager 25  
Registration Division (TS-767)

From: Samuel M. Creeger, Chief  
Review Section No. 1  
Exposure Assessment Branch  
Hazard Evaluation Division (TS-769)

Attached please find the environmental fate review of:

Reg./File No.: 279-EUP-109  
Chemical: Dimethazone (FMC-57020)  
Type Product: Herbicide  
Product Name: COMMAND  
Company Name: FMC  
Submission Purpose: RCB request for soil persistence information.

Date In: 6/4/86  
Date Completed: AUG 12 1986  
Action Code: 701  
EAB #: 6672  
Days: 0.2

Deferrals To:  
____ Ecological Effects Branch  
____ Residue Chemistry Branch  
____ Toxicology Branch

Monitoring study requested by EAB:  
Monitoring study voluntarily conducted by registrant:  

709
1. CHEMICAL: Dimethazone.

2. TEST MATERIAL: N/A.

3. STUDY/ACTION TYPE: RCB request for soil persistence information from EAB.

4. STUDY IDENTIFICATION: N/A.

5. REVIEWED BY: Samuel M. Creeger, Chief
   Section #1/EAB
   Hazard Evaluation Division

   [Signature]
   AUG 12 1986

6. APPROVED BY: Samuel M. Creeger

7. CONCLUSIONS: Field dissipation data previously submitted by FMC and evaluated by EAB in the August 27, 1985 evaluation, indicate that low levels of dimethazone residues can be expected in soil at 10 months post-application. This is based on residues actually found at 7 months post-application of 0.06-0.14 ppm and residues actually found at one year post-application of 0.02-0.16 ppm. (Soil samples were not taken at 10 months).

   Although residues were not found to be taken up by rotational crops when a 10 month rotational interval was observed, recent data indicate the potential for phytotoxicity when low levels of residues are in the soil.

8. RECOMMENDATIONS: The above CONCLUSIONS should be relayed to the RCB/HED in response to their request for same.

9. BACKGROUND: RCB is asking for soil persistence data of dimethazone so they can determine if application to fallow land, which will then be planted to wheat at 10 months post-application, is a food or a non-food use. Refer to the memo from RCB dated Aug. 2, 1985 (attached).

10. DISCUSSION OF INDIVIDUAL STUDIES: N/A.

11. ONE-LINER: New information was not included with this submission; therefore, the one-liner was not amended.

12. CBI: no CBI was included with this submission.
MEMORANDUM


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

THRU: Charles L. Trichilo, Chief Residue Chemistry Branch Hazard Evaluation Division (TS-769)

TO: Robert Taylor, PM 25 Fungicide-Herbicide Branch Registration Division (TS-767)

The Agricultural Chemicals Group, FMC Corporation is requesting an Experimental Use Permit to ship and use Command® 6 EC containing 2-(2-chlorophenyl)methyl-4,4-dimethyl-3-isoxazolidinone on fallow land.

Command® 6 EC whose Confidential Statement of Formula was submitted with PP#43128 contains 6 lbs of active ingredient per gallon. The inert ingredients of this formulation have been cleared under Section 180.1001 (c) or (d).

This Experimental Use Permit request is for a period of two years (July 1, 1985 through July 1, 1987) and involves 183 gallons (1,098 lbs. active) of Command® 6 EC to be applied in Colorado, Kansas, Montana, Nebraska, North Dakota, South Dakota, and Wyoming to 1,100 acres per year (2,200 acres total).

Command® 6 EC is to be applied alone or in tank mix combination at rates of 0.5 to 1.25 lbs a.i./A in a surface applied broadcast application with ground equipment using a finished spray volume of 5 to 40 gallons per acre. In areas where the winter wheat-fallow-winter wheat cropping system is practiced, make application after wheat harvest but before germination of volunteer wheat and other fall germinating winter annual weeds. Do not plant wheat sooner than 10 months after a late summer or fall application.

Providing EAB finds no residues remaining in the soil at the time of planting the subsequent crop, we would consider this to be a non-food use.
Conclusions and Recommendations

We refer to EAB as to their concerns about residues remaining in the soil at the time of planting the subsequent crop. If there are no residues remaining in the soil at the time of planting the subsequent crop, we would consider this to be a non-food use and would have no objections to the proposed EUP. If there are residues in the soil, this would be considered a food use and would require tolerances for residues in the subsequent crop.

TS-769:RCB:LSP:1sp:CM#2:Rm810:X77324:8/1/85
RDI: R. Loranger, 8/1/85; R.D.Schmitt, 8/1/85
cc: Reading File, Circulation File, Subject File, Reviewer, EAB
PMSD/ISB