Date Out EFB: 02 FEB 1982

Ecological Effects Branch

Toxicology Branch

Residue Chemistry Branch

To: Product Manager 15 LaRocca TS-767 Dr. Willa Garner From: Chief, Review Section No. 1 Environmental Fate Branch Attached please find the environmental fate review of: Reg./File No.: 241-260 Chemical: Amdro Type Product: Insecticide Product Name: Amdro Company Name: Am. Cyanamid Submission Purpose: use on cropland ZBB Code: 3(c)(7) ACTION CODE: 330 Date in: 12/14/81 EFB # 153 Date Completed: 02 FEB 1982 TAIS (level II) Days Deferrals To: 63 2

1.0 INTRODUCTION

American Cyanamid has submitted a petition for the conditional registration of Amdro fire ant insecticide for use in the control of fire ants in cropland.

2.0 Amdro: AC 217,300: CL 217,300

$$F_3C$$

$$C = CH - C - CH = C$$

$$H$$

tetrahydro-5,5-dimethyl-2(1H)-pyrimidone(3-(trifluoro-methyl)phenyl)-1-(2-(4-(trifluoromethyl)-phenyl)ethenyl)-2-propenylidene)hydrazone

3.0 DISCUSSION

- 3.1 No new environmental fate data submitted.
- 3.2 The following summarizes the known environmental fate and chemistry of Amdro:
 - slightly soluble in water (2 ppb);
 - gradually degrades under aerobic and anaerobic conditions;
 - parent and metabolites do not leach;
 - microbial activity not affected;
 - microbial degradation of Amdro occurs;
 - rapidly photodegrades in soil and water;
 - rapid field dissipation when exposed to light;
 - does not accumulate in rotational crops
- 3.3 The following data requirements have been satisfied for field and vegetable crop use:
 - soil photodegradation
 - water photodegradation
 - aerobic metabolism
 - anaerobic metabolism
 - leaching
 - field (soil) dissipation
 - rotational crop

- 3.4 The following data requirements are outstanding:
 - hydrolysis
 - fish accumulation

However, at a meeting on December 1, 1981, with EFB, RD and the registrant as participants, the registrant agreed to submit a new fish accumulation study along with a request for a waiver of the hydrolysis study.

4.0 RECOMMENDATION

Based on the known properties and environmental behavior of Amdro, EFB concurs with the granting of the conditional registration for cropland use.

EFB anticipates the results of the fish accumulation study and hydrolysis study waiver request will be submitted in the near future.

Richard V. Moraski

Chemist, Review Section No. 1