Shaughnessy No.: 081901
Date out of EAB: FEB 25 1988

To: Lois Rossi
Product Manager 21
Registration Division (TS 767C)

From: Emil Regelman, Supervisory Chemist
Review Section #3
Exposure Assessment Branch
Hazard Evaluation Division (TS 769C)

Thru: Paul F. Schuda, Chief
Exposure Assessment Branch/HED (TS 769C)

Attached, please find the EAB review of...

Reg./File #: 50534-7

Chemical Name: Chlorothalonil

Type Product: fungicide

Product Name: Daconil, Bravo, Clortosip

Company Name: Fermenta

Purpose: Response to EAB review of Environmental Fate Data

Date Received: 11/4/87 Action Code: 401

Date Completed: 2/24/88 EAB #(s): 80094

Monitoring Study Requested: ___ Total Reviewing Time: 2.0

Monitoring Study Volunteered: ___

Deferrals to: Ecological Effects Branch

___ Residue Chemistry Branch

___ Toxicology Branch

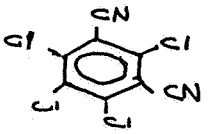
1. CHEMICAL:

chemical name: 2,4,5,6-Tetrachloro-1,3-benzenedicarbonitrile

common name: chlorothalonil

trade name: Bravo, Daconil, Clortosip

structure:




CAS #: 1897-45-6

Shaughnessy #: 081901

2. TEST MATERIAL: n.a.

3. STUDY/ACTION TYPE: response to EAB comments

4. STUDY IDENTIFICATION: n.a.

5. REVIEWED BY:

Typed Name: E. Brinson Conerly
Title: Chemist, Review Section 3
Organization: EAB/HED/OPP

E. Brinson Conerly 2/25/88

6. APPROVED BY:

Typed Name: Emil Regelman
Title: Supervisory Chemist, Reiew Section 3
Organization: EAB/HED/OPP

E Regelman
FEB 25 1988

7. CONCLUSIONS:

The data base for chlorothalonil is still deficient in several key areas. The Registration Standard (FRSTR) will be published shortly summarizing currently required data.

8. RECOMMENDATIONS:

The applicant should begin generating the appropriate data to fill known data requirements.

9. BACKGROUND:

The applicant raises several issues:

1) photodegradation in water -- "A new study (Document No. 1185-85-0075-EF-001) was submitted on April 30, 1987 and assigned MRID #40183418. Data requirement should now be satisfied."

EAB response -- this study was deemed unsatisfactory for many of the same reasons for which the previous studies have been rejected [EBC review (10/02/87)]. This data requirement is still unsatisfied.

2) photodegradation in soil -- "Data and information submitted December 30, 1985 in MRID #00156470 (EPA Acc. No. 260843) should have established the scientific validity of the previously submitted study. We have not received any comments on the December 1985 submission but believe that this data requirement should be satisfied."

EAB response -- We have no branch record of such a submission. If the applicant believes that requirements will be met by this document, it should be resubmitted.

3) photodegradation in air -- "This data requirement was waived due to the low vapor pressure of chlorothalonil. Copy of EPA's letter of waiver dated April 7, 1986 is attached."

EAB response -- The applicant is correct that these requirements were previously waived. However, as the applicant is aware, the environmental data base is being reevaluated in preparation for issuing a Registration Standard.

4) leaching (adsorption/desorption) -- "An adsorption/desorption study (Document No. 555-4EF-81-0216-001) and an aged soil leaching study (Document NO. 720-3EF-85-00001-001) were submitted in EPA accession No. 259753. Attached is a copy (cover letter dated August 20, 1986) of the Agency's review of these studies in which it was concluded that 'These studies fulfill the EPA requirements for leaching (adsorption/desorption) and for mobility of aged residues of chlorothalonil in soils, per Sec. 163-1.'"

EAB response -- The applicant is correct that these studies were accepted.

5) field dissipation studies -- "Several studies have been submitted previously which relate to the field dissipation of chlorothalonil. Most notably, soil dissipation data are included from three locations as part of the Field Rotational Crop Study with Bravo 500, Document No. 535-3CR-81-0199-001 (MRID #00156477). They also requested data on field rotational crops. This requirement was also satisfied with this study. The Chlorothalonil Registration Standard asks for field dissipation studies on several formulations. Two of these are for products which were developed and registered for use only in greenhouses...[which in 1985]...were voluntarily cancelled by Fermenta (then SDS Biotech). Fermenta has no registered "dust" formulations of chlorothalonil and should have no obligation to conduct field dissipation studies on dust formulations. ...[Further,] ...there is no reason to believe that there are any differences in the physical characteristics of chlorothalonil in

spray tank dilutions of the different formulations which should merit the extensive amount of field dissipation testing of each formulation requested by the EPA. In all of these cases, the finished spray delivers chlorothalonil as finely ground particles. Thus, soil dissipation studies on any of these commonly used sprayable formulations should be equally applicable to the other formulations...."

EAB response -- A reevaluation of these studies is in progress due to Registration Standard development.

10. DISCUSSION OF INDIVIDUAL TESTS OR STUDIES: n.a.

11. COMPLETION OF ONE-LINER: n.a.

12. CBI APPENDIX: n.a.