FILE COPY

Date Out. EFB: OCT 14 1981

To Product Manager 21 Jacoby
TS-767

From Dr. Willa Garner III
Chief, Review Section No. 1
Environmental Fate Branch

Attached please find the environmental fate review of:

Reg./File No.: 677-313

Chemical: Chlorothalonil

Type Product: Fungicide

Product Name: Bravo 500

Company Name: Diamond Shamrock

Submission Purpose: Aquatic field study protocol

ZBB Code: ?

ACTION CODE: 450

Date in: 10/8/81

EFB # 8

Date Completed: OCT 14 1981

TAIS (level II)	Days
67	2

Deferrals To.

X Ecological Effects Branch

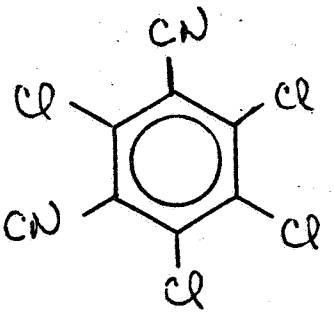
_____ Residue Chemistry Branch

_____ Toxicology Branch

1

1.0 Diamond Shamrock has submitted copies of the final protocol entitled "Aquatic Field Study with Bravo 500" (Acc. No. 246003) for review.

2.0 Bravo 500: chlorothalonil



tetrachloroisophthalonitrile

3.0 DISCUSSION

According to the registrant's letter dated 8/12/81 enclosed in the submission, the draft protocol for this aquatic field study had been reviewed and that the comments made were incorporated into the final version of the protocol. The registrant's letter also states that the study already was in progress and that analyses of samples would begin in about 60 days (October, 1981).

In response to an EEB request dated 6/9/81, EFB reviewed the draft protocol and sent its comments to EEB on 6/15/81. All EFB comments appear to be in the final protocol.

The stated objectives of the study are: 1) to determine toxicological impact on fish as a result of runoff; 2) to measure residue levels in runoff water; and 3) to measure residue levels in pond water, pond sediment and fish.

4.0 RECOMMENDATIONS

4.1 The protocol appears to have incorporated all EFB suggestions. However, it is still unclear if residue analyses will include parent and metabolic products DS-3701 and 3-cyano-2,4,5,6-tetrabenzamide. It is recommended that analyses for all three species be done.

4.2 EFB reiterates the need for copies of analytical methodologies used including recovery data.

4.3 EFB defers to EEB to comment on whether all ecological factors have been considered.

Richard V. Moraski
Chemist
Review Section No. 1
Environmental Fate Branch