105001
SHAUGHNESSEY NO.

26
REVIEW NO.

EEB BRANCH REVIEW

DATE: IN 2/19/85 OUT 4/18/85

FILE OR REG. NO. 241-238

PETITION OR EXP. PERMIT NO.

DATE OF SUBMISSION 2/12/85

DATE RECIEVED BY HED 2/14/85

RD REQUESTED COMPLETION DATE 4/29/85

EEB ESTIMATED COMPLETION DATE 4/22/85

RD ACTION CODE/TYPE OF REVIEW 352

TYPE PRODUCT(S): I, D, H, F, N, R, S Insecticide

DATA ACCESSION NO(S).

PRODUCT MANAGER NO. W. Miller (16)

PRODUCT NAME(S) Counter

COMPANY NAME American Cyanamid Company

SUBMISSION PURPOSE Registrant request to use rainbow trout in fish early-life stage test.

SHAUGHNESSEY NO.	CHEMICAL & FORMULATION	% A.I.
105001	Terbufos	

6 pages

22 APR 1985

MEMORANDUM

TO: William Miller, PM Team 16
Insecticide-Rodenticide Branch
Registration Division TS-767C

THRU: Dave Coppage, Supervisory Biologist
Ecological Effects Branch
Hazard Evaluation Division TS-769C

THRU: Michael Slimak, Chief
Ecological Effects Branch
Hazard Evaluation Division TS-769C

SUBJECT: American Cyanamid Request To Use Rainbow Trout As The Test Species In A Fish Early-Life Stage Study.

The subject request is contained in a letter to Ms. Marilyn Mautz of your team from a Mr. Mark Galley, Plant Industry Registrations Coordinator for American Cyanamid; letter dated February 12, 1985.

While EEB normally recommends this study to be performed with brook trout (Salvelinus fontinalis), the letter lists several reasons why their consultant recommends rainbow trout as the test species (we presume they mean Salmo giardneri).

EEB does not necessarily agree that the reasons given by their consultant for the substitution (i.e., rainbow trout has become "standard" for this test, is "more widely distributed", and there is "no difference" in their response to toxicants) are either valid or aqequate for our purposes, however we will not reject an early-life stage study simply because they use Salmo giardneri. It is interesting to note that the consultant's lab has submitted other chronic fish tests using rainbow trout and may therefore simply be "geared-up" for this species. We would agree that switching to brook trout from rainbow trout could require major revisions to the protocol.

While we do not object to the use of rainbow trout if a satisfactory study is performed, we do not wish to appear to condone the rationale stated in the February 12 letter, nor would we agree that this memo signifies a general change in our recommendations for future chronic fish studies.

John Bascietto

John Bascietto
Ecological Effects Branch
Hazard Evaluation Division
TS-769 C

CYANAMID

American Cyanamid Company
Agricultural Research Division
P.O. Box 400
Princeton, NJ 08540
(609) 799-0400

February 12, 1985

Ms. Marilyn Mautz
PM Team (16)
Registration Division (TS-767C)
U.S. Environmental Protection Agency
Crystal Mall, Building No. 2
1921 Jefferson Davis Highway
Arlington, Virginia 22202

Re: COUNTER® systemic insecticide
EPA Reg. No. 241-238
Terbufos Registration Standard
W. Miller letter of 1/7/85
(attached)

Dear Ms. Mautz:

I am requesting that American Cyanamid Company be allowed to use rainbow instead of brook trout as the fresh water fish in the "Fish Early Life Stage Life Cycle" study as specified by Section 40 CFR, 158.145, 72-4.

The reasons that rainbow trout is the preferred fish were suggested to us by Carl Thomson* and are as follows:

1. Over the years it has become the standard test species for embryo larval studies.

2. The rainbow trout is more widely distributed geographically than the brook trout. This fact may limit the usefulness of the study in years ahead.

3. Generally, there is little or no difference between the two species with respect to their response to toxicants.

Since COUNTER is used extensively throughout the corn belt and adjacent geography, we would like to use the more representative fish species for our study, i.e., the rainbow trout.

I discussed this request in a telephone conversation with John Bascietto of EEB on January 31, 1985 and he promised to review this request expeditously, if I submitted it promptly to you. I have enclosed a copy for him with this letter.

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CYANAMID

I would appreciate a response at your earliest convenience as we would very much like to begin this study as requested by the subject standard by June 1986.

Respectfully requested,

AMERICAN CYANAMID COMPANY
Agricultural Research Division

Mark W. Galley

Mark W. Galley, Ph.D.
Registrations Coordinator
Plant Industry Registrations

MWG:sd
Enc.

cc: J. Bascietto

*Carl Thompson
Aquatic Toxicology Supervisor
ABC Laboratories
P.O. Box 1097
Columbia, MO 65205
(314) 474-8579

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Rec'd EPA
2/12/85

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

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

JAN 7 1985

Dr. Kenneth A. Sund
Registrations Coordinator
American Cyanamid Company
Agricultural Research Division
P.O. Box 400
Princeton, NJ 08540

Dear Dr. Sund:

Subject: Terbufos Registration Standard

This is in response to your letter of November 12, 1984 regarding the appropriate species to be used for the fish early life stage study (72-4).

You are reminded that the aquatic laboratory testing requirements for terbufos listed under section 158.145, 72-4 "Fish Early Life Stage and Aquatic Invertebrate Life-Cycle", consists of two laboratory tests. It is recommended that the brook trout, Salvelinus fontinalis and the waterflea, Daphnia magna be tested as the freshwater fish and the aquatic invertebrate.

Sincerely,

William H. Miller

William H. Miller
Product Manager (16)
Insecticide-Rodenticide Branch
Registration Division (TS-767)

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105001

KBN

September 15, 1987
87018

Harry Craven EPA/HED/EEB
US EPA Office of Pesticide Programs
Room 807 C
1921 Jefferson Davis Highway
Crystal Mall No. 2
Washington, DC 22202

Subject: Contract No. 68-02-4278, Work Assignment #2 Terbufos DERs

Dear Harry:

Enclosed is the last set of final and draft DERS, ONE-LINERS and their associated studies. They include the following:

Pesticide	EPA Number
Terbufos	✓ 162523 - Final (~~studies sent with draft DERs~~)
	✓ 162524
	✓ 96392 - Draft
	✓ 167387
	✓ 161573
	✓ 161574
	✓ 162525
	✓ 400093-01

Did not return the hard copy of the studies. - JRN 9/15/87

A question had been asked at the beginning of this evaluation why ABC Labs had used ld ^{14}C in conducting the Daphnia magna 21-day chronic study (MRID No. 162525). The attached letter from their report indicates the use of this approach was necessitated by either interference in the test water or test levels of terbufos below standard detection methods. Please review these draft DERs and call me with your comments.

Sincerely,

James R. Newman, Ph.D.
Project Manager

Enclosure

JRN/afb

KBN ENGINEERING AND APPLIED SCIENCES, INC.
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