

59-95

MEMORANDUM

SUBJECT: Waiver of specific terrestrial field dissipation requirement (164-1) and acceptance of recalculated desorption parameters (163-1) for the herbicide propanil

TO: Walter Waldrop, PM 71 and Eric Feris, PM Team Reviewer  
Reregistration Division (7508W)

FROM: Alex T. Clem, Environmental Scientist *Alex Clem*  
Environmental Chemistry, Review Section 3, EFGWB

THRU: Akiva D. Abramovitch, Ph.D, Head *Akiva Abramovitch*  
Environmental Chemistry, Review Section 3, EFGWB

Henry Jacoby, Chief  
EFGWB

*Henry Jacoby*  
5/9/95

**Administrative Conclusions and Recommendations.** EFGWB waives the terrestrial field dissipation requirement (164-1) for propanil (STAMPEDE) for the limited use identified in the next section below<sup>1</sup>. Ample existing, satisfactory data from lab and field studies applicable to the reregistration of propanil for use on rice are directly transferrable to the labeled, narrow terrestrial use under consideration. Performance of an additional study would not add significantly to the existing extensive database, and thus to our requisite understanding of the environmental fate of this short-lived herbicide. Without further comment we also accept as satisfactory the recalculated batch desorption parameters which show that desorption is considerably less (higher desorption coefficients) than originally calculated<sup>2</sup>. We remind the registrant that Spray Drift studies are required for reregistration.

**Background and Introduction for Terrestrial Field Waiver.** Propanil is a candidate for reregistration. It is now used almost exclusively as a postemergent herbicide in rice production. Rohm and Haas has satisfied the data requirements for rice (including aerobic soil metabolism, anaerobic aquatic metabolism and aquatic field dissipation) except for spray drift and droplet size spectrum. They now seek a waiver of terrestrial field dissipation studies<sup>1</sup> in order to maintain a limited terrestrial use on a total of approximately 100,000 acres in label specified North Dakota, South Dakota, Minnesota, and Montana. This use is

<sup>1</sup>The "Request for Waiver" documentation provided by the sponsor Rohm and Haas is identified by the attached title page of their submission. There is no assigned MRID.

<sup>2</sup>Documentation for the recalculated desorption data is identified by the attached study title for MRID 432172-01. Results are given in the associated data Table I which is also attached.

against a very specific weed spectrum with a narrow growth timing window in propanil tolerant, hard red spring wheat, spring barley, and durum wheat. Only in this geographic region is there the correct convergence of plant species and environmental conditions for propanil to be effective. Propanil is not effective against the major weed problem in the region (wild oats) and damages winter wheat. A single application is made at a rate of approximately 1 lb ai/acre compared to a seasonal maximum of 8 lb ai/acre for rice.

**Rationale for the Waiver.** Propanil is stable against simple hydrolysis and aqueous photolysis (there is some evidence that these processes can be catalyzed or sensitized). However, satisfactory laboratory and field studies under both aerobic soil and aerobic and anaerobic aquatic conditions consistently demonstrate that propanil is rapidly metabolized with half-lives in a nominal range of 0.5 to 3 days. Some of the soils included in existing studies are representative of the wheat growing region (North Dakota) and also have textural classifications similar to those in rice use areas. Metabolism was comparable in all cases. Major metabolites and dissipative channels have been characterized, and we see no reason why metabolic capacity would be appreciably altered in the soils of geographic interest under typical application conditions. The Branch will not prepare a final environmental fate assessment until the time of RED review, but short aerobic and anaerobic half-lives, infrequency of application, soil sorption characteristics, and the typical absence of rapidly drained or sandy soils in the growing region indicate no groundwater concerns for parent and known degradates. For the same reasons, no general surface water concerns arise in this area. (Soil erosion is problematic at some sites in the four state region, and could possibly have an immediate short-term surface water impact under worst conditions.) As should be evident from the above discussion, conducting a terrestrial field dissipation study in the stipulated geographic region would not change the environmental fate assessment for this herbicide, and is therefore unnecessary.

Study Title

Request for a Waiver of the Terrestrial Field Dissipation Data Requirement in Support of Terrestrial Uses of Propanil Formulated as STAMPEDE® Herbicide.

Guideline

164-1

Author

Roger A. Novak, Ph.D.

Report Completion Date

June 19, 1994

Performing Laboratory

NPC, Incorporated  
22636 Glenn Drive, Suite 304  
Sterling, VA 22170

Sponsor

Rohm and Haas Company  
727 Norristown Road  
Spring House, PA 19477

Project Identification

NPC Project No. 3500TR

Rohm and Haas Company Technical Report No.34-94-87

Total Number of Pages

33

NPC No. 3500TR page 1

Study Title

Propanil: Response to EPA Review of Adsorption/Desorption Study -  
Recalculation of Desorption Coefficient

Supplement to: Fathulla, R. N., The Adsorption and Desorption of 14C-Propanil on Typical  
Agricultural Soils, 5/24/90, MRID 42780401

Guideline

163-1

Author

Stephen Smith, Jr., Ph.D.

Report Completion Date

April 20, 1994

Performing Laboratory

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Sponsor

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727 Norristown Road  
Spring House, PA 19477

Laboratory Project Identification

Rohm and Haas Company Technical Report No. 34-94-61

RIN 1876-95

PROPANIL EFGWB REVIEW

Page 5 is not included in this copy.

Pages \_\_\_\_\_ through \_\_\_\_\_ are not included.

The material not included contains the following type of information:

- Identity of product inert ingredients.
- Identity of product impurities.
- Description of the product manufacturing process.
- Description of quality control procedures.
- Identity of the source of product ingredients.
- Sales or other commercial/financial information.
- A draft product label.
- The product confidential statement of formula.
- Information about a pending registration action.
- FIFRA registration data.
- The document is a duplicate of page(s) \_\_\_\_\_.
- The document is not responsive to the request.

The information not included is generally considered confidential by product registrants. If you have any questions, please contact the individual who prepared the response to your request.

DP BARCODE: D205681

REREG CASE # 0226

CASE: 818688  
SUBMISSION: S470213

DATA PACKAGE RECORD  
BEAN SHEET

DATE: 08/02/94  
Page 1 of 1

\* \* \* CASE/SUBMISSION INFORMATION \* \* \*

CASE TYPE: REREGISTRATION ACTION: 614 DATA WAIVER REQUEST 100.00 %  
CHEMICALS: 028201 Propanil

ID#: 028201

COMPANY:

PRODUCT MANAGER: 71 WALTER WALDROP 703-308-8062 ROOM: CS1 2C3

PM TEAM REVIEWER: ERIC FERIS 703-308-8048 ROOM: CS1 3N5

RECEIVED DATE: 06/22/94 DUE OUT DATE: 08/31/94

\* \* \* DATA PACKAGE INFORMATION \* \* \*

DP BARCODE: 205681 EXPEDITE: Y DATE SENT: 07/20/94 DATE RET.: / /

CHEMICAL: 028201 Propanil

DP TYPE: 001 Submission Related Data Package

CSF: N LABEL: N

ASSIGNED TO	DATE IN	DATE OUT	ADMIN DUE DATE:
DIV : EFED	08/10/94	/ /	09/08/94
BRAN: EFGB	/ /	/ /	NEGOT DATE: / /
SECT: CRS1	/ /	/ /	PROJ DATE: / /
REVR :	/ /	/ /	
CONTR:	/ /	/ /	

\* \* \* DATA REVIEW INSTRUCTIONS \* \* \*

LIST A REREGISTRATION CHEMICAL - PROPANIL

PLEASE ROUTE TO ALEX CLEM

Alex, this is the waiver request I told you about in my cc:Mail message of 7-20-94. Please review, etc...

Thanks

\* \* \* DATA PACKAGE EVALUATION \* \* \*

No evaluation is written for this data package

\* \* \* ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION \* \* \*

DP BC	BRANCH/SECTION	DATE OUT	DUE BACK	INS	CSF	LABEL
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DP BARCODE: D203283

REREG CASE # 0226

CASE: 818688  
SUBMISSION: S465398

DATA PACKAGE RECORD  
BEAN SHEET

DATE: 05/12/94  
Page 1 of 1

\*\*\* CASE/SUBMISSION INFORMATION \*\*\*

CASE TYPE: REREGISTRATION      ACTION: 627 CORE DATA  
CHEMICALS: 028201 Propanil      100.00 %

ID#: 028201

COMPANY:

PRODUCT MANAGER: 71 WALTER WALDROP      703-308-8062      ROOM: CS1      2C3  
PM TEAM REVIEWER: ERIC FERIS      703-308-8048      ROOM: CS1      3N5  
RECEIVED DATE: 05/04/94      DUE OUT DATE: 08/02/94

\*\*\* DATA PACKAGE INFORMATION \*\*\*

DP BARCODE: 203283      EXPEDITE: N      DATE SENT: 05/12/94      DATE RET.: / /  
CHEMICAL: 028201 Propanil  
DP TYPE: 001 Submission Related Data Package

CSF: N      LABEL: N

ASSIGNED TO	DATE IN	DATE OUT	ADMIN DUE DATE: 08/10/94
DIV : EFED	05/17/94	/ /	NEGOT DATE: / /
BRAN: EFGB	/ /	/ /	PROJ DATE: / /
SECT: IO	/ /	/ /	
REVR :	/ /	/ /	
CONTR:	/ /	/ /	

\*\*\* DATA REVIEW INSTRUCTIONS \*\*\*

LIST A REREGISTRATION CHEMICAL

Additional desorption data to support Rohm & Haas' terrestrial uses of propanil, per Brinson Conerly's request.

\*\*\* DATA PACKAGE EVALUATION \*\*\*

No evaluation is written for this data package

\*\*\* ADDITIONAL DATA PACKAGES FOR THIS SUBMISSION \*\*\*

DP BC	BRANCH/SECTION	DATE OUT	DUE BACK	INS	CSF	LABEL
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