180951

DP Barcode: ~~D164838, D165109~~
PC Code No.: 028201
EFGWB Out:

OCT 8 1992

To: Product Manager 71 (Waldrop/Stowe)
Reregistration Division

From: Akiva D. Abramovitch, Ph.D., Head
Environmental Fate Review Section #3
Environmental Fate & Ground Water Branch
Environmental Fate and Effects Division (H7507C)

Thru: Henry Jacoby, Chief
Environmental Fate & Ground Water Branch
Environmental Fate and Effects Division (H7507C)

Attached, please find the EFGWB review of...

Reg./File #: n.a.

Chemical Name: Propanil

Type Product: herbicide

Product Name: n.a.

Company Name: Propanil Task Force

Purpose: request for waiver of lab volatility, spray drift, and downwind crop deposition data requirements

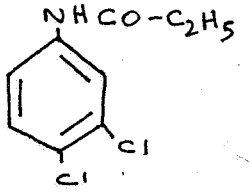
Action Code:_____ EFGWB #(s): ~~91-1208~~ 92-1208 Total Review Time: 1 days

EFGWB Guideline/MRID Summary Table: The review in this package contains...											
161-1		162-1		164-1		165-1		166-1			
161-2		162-2		164-2		165-2		166-2			
161-3		162-3		164-3		165-3		166-3			
161-4		162-4		164-4		165-4		167-1			
201-1	no MRID	163-1		164-5		165-5		167-2			
202-1	no MRID	163-3									

bcp

1. CHEMICAL:

chemical name: 3,4-dichloropropionanilide, N-(3,4-dichlorophenyl) propanamide
common name: Propanil
trade name: n.a.
structure:
CAS #: 709-98-8
Shaughnessy #: 28201



2. TEST MATERIAL: n.a.

3. STUDY/ACTION TYPE: request for waiver of lab volatility, spray drift, and crop deposition data requirements

4. STUDY IDENTIFICATION: n.a.

5. REVIEWED BY:

Typed Name: E. Brinson Conerly-Perks
Title: Chemist, Review Section 3
Organization: EFGWB/EFED/OPP

E.B. Conerly-Perks 10/6/92

6. APPROVED BY:

Typed Name: Akiva Abramovitch
Title: Head, Review Section 3
Organization: EFGWB/EFED/OPP

Akiva Abramovitch OCT 6 1992

7. CONCLUSIONS:

EFGWB cannot waive the required spray drift studies, since, in general, this data requirement is imposed on all aerially applied pesticides, especially herbicides. *[Attached please see the memorandum from R. Hitch of the spray drift team.]*

8. RECOMMENDATIONS:

The applicant should be informed that the subject studies cannot be waived. Per PR notice 90-3 [copy attached], "Pesticide registrants...have the option of fulfilling spray drift data requirements through participation in ... [*the Industry-Wide Spray Drift*] Task Force.

9. BACKGROUND:

The applicant desires to have EFGWB waive any further data requirement on lab volatility, spray drift, or downwind crop deposition. The present submission consists of administrative material and a report of a 1988 spray drift and crop deposition study. The study provides some data on deposition on crops and soil and in air under the conditions specified. It does not provide an in-depth description of the study protocol or of droplet size spectrum.

ENVIRONMENTAL FATE ASSESSMENT

The data base for Propanil is incomplete at this time, and therefore only very limited assessment can be made of its expected behaviour in the environment. Propanil is stable to hydrolysis at pH 5, 7, and 9 in the laboratory, and, *based on a marginally acceptable study*, is stable to unsensitized aqueous photolysis. *Based on partially acceptable studies*, it is rapidly metabolized under aerobic or anaerobic conditions in a water/sediment milieu, and undergoes hydrolysis at a moderate rate in the same water/sediment system. These same studies indicate that degradates from metabolism prefer to associate with the soil phase rather than the aqueous phase, i.e. they become more immobile with time. *Based on a partially acceptable study*, Propanil metabolizes rapidly in aerobic soil with a half-life of 0.5 days. Other environmental fate data, including leaching, anaerobic soil metabolism, aquatic metabolism, and field dissipation, are yet to be submitted.

GROUND WATER ASSESSMENT

Due to its rapid metabolism in a water/soil matrix, Propanil might not be likely to persist in ground water.

SURFACE WATER ASSESSMENT

Due to its rapid metabolism in a water soil/matrix, Propanil might not be likely to persist in surface water.

DATA BASE ASSESSMENT

Data requirements for aquatic food use (i.e. rice) and their status:

hydrolysis -- stable at pH 5, 7, and 9. [pH 5 -- MRID# 410666-01 (EBC 1/10/92); pH 7, 9 -- ACC# 00111395 (REN 10/30/75)]

photolysis in water -- fulfilled [MRID# 410707-01 (EBC 1/10/92)]

anaerobic aquatic metabolism -- partially fulfilled [MRID# 418726-01 (EBC 1/10/92] -- Propanil is rapidly metabolized under anaerobic conditions ($t_{\frac{1}{2}}$ = 2-3 days)

aerobic aquatic metabolism -- partially fulfilled [MRID# 418726-01 (EBC 1/10/92] -- Propanil is rapidly metabolized under aerobic conditions ($t_{\frac{1}{2}}$ = 2 days)

leaching/adsorption/desorption -- pending, also required for terrestrial crop use as noted above; to be submitted by the Propanil Task Force

aquatic field dissipation -- pending, to be submitted by the Propanil Task Force

long term field dissipation -- conditionally required, if the conventional short term field dissipation study so indicates

confined accumulation on rotational crops -- pending, will be submitted by the Propanil Task Force

field accumulation on rotational crops -- requirement reserved pending results of confined study, also required for terrestrial uses

confined accumulation on irrigated rotational crops -- pending

fish bioaccumulation -- waiver recommended [EBC 4/26/89] due to low k_{ow} and applicant's affirmation of low accumulation in fathead minnows

According to the 1987 Registration standard, 95% of the manufactured product is used on rice. The Propanil Task Force does not intend to submit data to support the terrestrial food uses (i.e. the 5% which is not rice). The additional studies required for registration on terrestrial crops include:

photodegradation on soil -- **NOT FULFILLED** -- will not be submitted by the Propanil Task Force

aerobic soil metabolism -- partially fulfilled, supplemental information provided by MRID 415387-01 (EBC 12/3/90) which indicated a short half-life (0.5 days). The primary degradate was DCA, with a half-life of ca. 30 days.

anaerobic soil metabolism -- partially fulfilled by the anaerobic aquatic metabolism study [MRID# 418726-01 (EBC 1/10/92]. The study provides the supplemental information that Propanil is rapidly metabolized under anaerobic conditions ($t_{\frac{1}{2}}$ = 2-3 days).

terrestrial field dissipation -- **NOT FULFILLED** -- will not be submitted by the Propanil Task Force

accumulation in confined rotational crops -- **NOT FULFILLED** -- will be submitted by the Propanil Task Force for rice

accumulation in field rotational crops -- conditionally required, if the confined study indicates uptake of residues of concern

EFGWB also required the following studies, listed below, which are not usually imposed for aquatic uses:

lab volatility
spray drift
downwind monitoring of deposition on other crops

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

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

12. CBI APPENDIX: n.a.

Sept. 28 1992

Brinson,

NPC asks that we give propanil a waiver from the spray drift studies (40 CFR 158.142). They contend that the incidents with propanil and prunes triggered the requirements but that Professor Akesson's '88 and '89 studies show that propanil can be applied without harm to prunes. It, therefore, follows that they should not be burdened with with spray drift studies

The case, in fact, is that all herbicides that are applied by air are being levied with the spray drift studies. NPC corporation should, be apprised that no waiver can be given and that they will either have to submit two drift field evaluations (and supporting Droplet Size Spectra) capable of meeting the data requirements or ~~they~~ the owners of propanil will have to join the spray drift task force.

Brinson, there is much useful data in the waiver submission and I would like to have it after you are thru with it.

Regards,

Robert K. Hitch

Robert K. Hitch

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

APR 10 1990

OFFICE OF
PESTICIDES AND TOXIC
SUBSTANCES

PR NOTICE 90-3

NOTICE TO REGISTRANTS OF PESTICIDE PRODUCTS

ATTENTION: Persons Responsible for Federal Registration and Reregistration of Pesticides

SUBJECT: Announcing the Formation of an Industry-Wide Spray Drift Task Force

A Spray Drift Task Force has been organized pursuant to provisions of FIFRA §3(c)(2)(B)(ii) to share the cost of developing a generic spray drift data base which is expected to be capable of satisfying spray drift data requirements for virtually all pesticide product registrations in the United States and Canada. Because of the wide cross section of pesticide registrants who could potentially benefit from this endeavor, the Environmental Protection Agency takes this unusual step to inform all pesticide registrants of its existence. Groundwork for this Task Force has been laid through joint efforts of EPA, the National Agricultural Chemicals Association, Agriculture Canada, and Environment Canada. This approach to fulfilling pesticide spray drift data requirements should result in considerable financial savings for pesticide registrants, while at the same time providing the Agency with a more complete and scientifically more sound basis for evaluating off-target movement of pesticides and assessing exposure of humans and the environment.

Pesticide registrants and those who have applied for or anticipate applying for registration of one or more pesticide products have the option of fulfilling spray drift data requirements, through participation in this Task Force, for registration standards, general data call-ins, accelerated reregistration under FIFRA §4 (FIFRA 88), and new product registrations now and in the future. The Agency will accept evidence of full and continuous participation in this Task Force to justify requests for extensions of deadlines for submission of spray drift studies. Acceptability of Task Force participation with respect to meeting Canadian pesticide registration data requirements must be worked out separately with the corresponding Canadian government agencies.

The Task Force is organized as a business Joint Venture, with costs to be shared equally by all participants. Each participating company will appoint representatives to Administrative and Technical Committees. The U.S. Environmental Protection Agency is not an administrative participant in the joint venture, but is represented on the technical committee, which will guide development of the data base, select study protocols, and supervise research. The target date for initial enrollment in the Joint Venture agreement is April 18, 1990, followed by an open enrollment period of 60 days. Late enrollment of participants thereafter will involve payment of an equal share of costs determined from the date of Task Force organization, interest on that amount, and possible additional financial penalties. Registrants are cautioned to carefully calculate the costs of complying with current and anticipated spray drift data requirements for product defense and new product registrations as they decide on participation in the Task Force. Those desiring further information may contact Charles O'Connor III at the law firm of McKenna, Conner & Cuneo, 1575 Eye St., NW, Washington, D.C. 20005 (telephone 202/789-7500) or Dr. John J. Lamber at FMC Corporation, 2000 Market St. Room 2255, Philadelphia, PA 19103 (telephone 215/299-6503).

Spray drift data already available from submissions to EPA, published research, and other sources within industry, government, and academia will be considered in assembling a data base that will allow accurate prediction of off-target movement of pesticides during application. Any such studies that are compensable under FIFRA §3(c)(1)(D) can only be used with the appropriate release from the owners of the data. The Task Force will retain ownership of the spray drift generic data base for purposes of supporting pesticide registrations and full rights to data compensation by non-participants wishing to cite the data base under provisions of FIFRA §3(c)(1)(D) for a period of 15 years following completion of the data base, anticipated in 1994.

The Task Force will prioritize the formulations, spray solutions, and product use patterns to be covered by the data base it produces. It is possible that certain atypical use patterns and uncommon formulations for which EPA might require separate spray drift studies would not be included in the data base. Early participation in the Task Force will give each registrant a voice in establishing those priorities.

The Task Force is committed to complete the data base within the deadlines imposed by FIFRA §4(f)(2)(B) for Phases Four and Five of accelerated reregistration. Participants in the Task Force individually and separately assume the responsibility of complying with spray drift data requirements for their various products containing active ingredients from Lists B, C, and D by these deadlines, and must understand and accept the risk involved in the possible failure of the Task Force to meet those

deadlines. Deadline extensions and waivers for spray drift studies must be requested from the Agency individually by registrants on a case-by-case basis.

This PR notice is issued by the Agency for the sole purpose of informing pesticide registrants of the activities if the Spray Drift Task Force. It is not intended to define or restrict the terms of or subsequent amendments to the Joint Venture agreement governing the Spray Drift Task Force and its operation.

Stephanie R. Irene
for Anne E. Lindsay, Director
Registration Division

E F Tinsworth
Edwin F. Tinsworth, Director
Special Review and
Registration Division