028201

4-1-80 (13)

EE BRANCH REVIEW

DATE: IN 4-1-80 OUT 4/11/80

FILE OR REG. NO. Section 18

PETITION OR EXP. PERMIT NO.

DATE DIV. RECEIVED

DATE OF SUBMISSION

DATE SUBMISSION ACCEPTED

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

DATA ACCESSION NO(S).

PRODUCT MGR. NO. Stubbs/Critchlow

PRODUCT NAME(S) Stam

COMPANY NAME

SUBMISSION PURPOSE Emergency use of propanil on hard red spring wheat in Minnesota and North Dakota.

CHEMICAL & FORMULATION Propanil

PROPANIL

100 Section 18 Application

100.1 Crop

Hard Red Spring Wheat

100.2 Target Organisms

Green Foxtail (Setaria viridis)
Yellow Foxtail (Setaria lutescens)

100.3 Date, Duration

May 1 - June 30, 1980

100.4 Application Methods, Directions, Rates

One application when weeds are at 2 to 4 leaf stage at 1.5 lb AI/acre.
Minnesota - ground only
North Dakota - ground and aerial

100.5 Treatment Areas

Minnesota - Northwest Counties of Clay, Kittson, Marshall, Norman, Polk, Roseau, Wilkin, Grant, Douglas, Otter Tail, Traverse, Pennington and Red Lake
- Approx. 0.6 M acres

North Dakota - Entire state
- Approx. 1.0 M acres

101 Physical and Chemical Properties

(See previous review by J. S. Leitzke, December 3, 1979)

102 Behavior in the Environment

(See previous review by J. S. Leitzke, December 3, 1979)

103 Toxicological Properties

(See previous reviews by J. S. Leitzke, December 3, 1979 and April 11, 1980)

104 Hazard Assessment

(See previous reviews by J. S. Leitzke, December 3, 1979 and April 11, 1980)

107 Conclusions

Ecological Effects Branch does not object to the Emergency Exemption for propanil on hard red spring wheat in Minnesota and North Dakota on the condition that field residue monitoring studies be conducted following this protocol:

1) Within the major wheat producing regions of Minnesota and North Dakota, select a lake or pond downwind of and immediately adjacent to a wheat field that will be treated with propanil aerially in North Dakota and on the ground in Minnesota as part of the requested Section 18.

2) The test pond water and hydrosoil should be analyzed in triplicate samples periodically for propanil, 3,4-DCA and TCAB residues.

3) The Minnesota and North Dakota Departments of Agriculture should prepare a full written report describing the test method, observations and results of the monitoring study and submit it to the Ecological Effects Branch (TS-769) of EPA.

John S. Leitzke John S. Leitzke 4/8/80
Section 2
Ecological Effects Branch, HED, (TS-769)

Norm Cook for H. J. Craven 4/10/80
Head, Section 2
Ecological Effects Branch, HED, (TS-769)

Clayton Bushong for Raymond W. Mathey 4/11/80
Branch Chief
Ecological Effects Branch, HED, (TS-769)

May 19, 1980

Meeting with Rohm & Haas on Propanil, May 9th

John S. Leitzke, Ecologist, Section #2
Ecological Effects Branch, HED (TS-769)

Richard F. Mountfort
Propanil PM, Team #25
Herbicides-Fungicides Branch, Registration Division (TS-767)

HRU: Norm Cook
Head, Section #2
Ecological Effects Branch, HED (TS-769)

HRU: Clayton Bushong, Chief
Ecological Effects Branch, HED (TS-769)

Attendees: John S. Leitzke & David L. Coppage
Ecological Effects Branch, HED
Richard F. Mountfort, H-F-B,
Registration Division
Stephen F. Krzeminski,
Adler & Tom Rogerson
Rohm & Haas Company

The purpose of the meeting was to discuss the feasibility of the proposed residue monitoring requirement, and, failing that, other possible avenues for dealing with the potential chronic hazards of propanil on fish from aerial applications on hard red spring wheat.

Major conclusions of this meeting were:

A. Rohm & Haas will encourage ground spraying, and will restrict aerial applications to windspeeds less than 10 mph with a 600 ft buffer zone to the nearest body of water.

B. Rohm & Haas will provide in writing a statement that their current analytical techniques for propanil are sensitive only down to about 10 ppb for biological waters, and will tell us where information on hydrolysis of propanil in natural water is in previous submissions.

C. Rohm & Haas should also recognize that the following features of EEB's previous hazard assessments remain:

J.Leitzke: cmg 5-14-80,TS-769,C12, (77725)

1. EEB's level of concern for chronic effects on the most sensitive coldwater indicator species, rainbow trout, is still 0.03 ppb.

2. There is still insufficient information to support the contention by Rohm & Haas that "new" technical batches of propanil are any less chronically toxic to fish than "old" batches of technical.

3. A rainbow trout 96-hr LC50 on the technical is still required as a condition of registration.

4. Two avian 5(+3)-day dietary LC50, preferably on bobwhite quail and mallards, on the technical are also still required as a condition of registration.

5. If the results of the above tests show that biologically significant levels exist, more tests may be required.