TO: B. Crompton  
Product Manager # 50  
Registration Division (H7505C)

FROM: Michael R. Barrett, Acting Head  
Ground-Water Technology Section  
Environmental Fate & Ground-Water Branch, EFED (H7505C)

THRU: Henry Jacoby, Chief  
Environmental Fate & Ground-Water Branch, EFED (H7507C)

Attached, please find the EFGWB review of:

Reg./File #: 49351
Chemical Name: prometon (Pramitol®)

Type Product: Herbicide
Product Name: Pramitol®
Company Name: Ciba-Geigy Corp.
Purpose: Review proposed Pramitol® small-scale retrospective ground-water monitoring protocol

Date Received: 5/24/89 (in EFED)  
Action Code: 665

Date Completed: 11/29/90  
EFGWB # (s): 90598

Monitoring study requested: X  
Total Review Time: 5 days

Monitoring study voluntarily: 

Deferrals To: X Ecological Effects Branch 
X Health Effects Division
1. **CHEMICAL:**

Chemical name: 2,4-bis(isopropylamino)-6-methoxy-s-triazine

Common name: prometon

Trade name: Pramitol®

Structure:

2. **TEST MATERIAL:**

Not applicable

3. **STUDY/ACTION TYPE:**

Review of draft (proposed) protocol for small-scale retrospective ground-water monitoring study, and evaluate the registrant's request to waive the retrospective study and initiate a new prospective study.

4. **STUDY IDENTIFICATION:**

Title: Small-scale retrospective ground-water monitoring study for Pramitol®

Author(s): James Demartinis

Gary Dickson

Submitted by: Roux Associates

The Huntington Atrium

775 Park Avenue

Suite 255

Huntington, New York 11743

for: Agricultural Division

CIBA-GEIGY Corporation

P.O. Box 18300

Greensboro, NC 27419

Identifying No.: 080804

Action Code: 665

Accession No.: not given

Record Number: 245772

Date Sent to EFED: 5/24/89

5. **REVIEWED BY:**

John Jordan, Ph.D.

Microbiologist

OPP/EFED/EFOW/Ground-Water Section

Signature: [Signature]

Date: 11/29/90
6. APPROVED BY:

Michael R. Barrett, Ph.D
Acting Head, Ground-Water Section
Environmental Fate & Ground-Water Branch

7. CONCLUSIONS:

Review of the small-scale retrospective monitoring protocol indicates some deficiencies. For example, there is no provision for monitoring wells directly on the site; proposed wells are located offsite, one downgradient and one upgradient. Proposed soil sampling procedures would not permit randomization. The proposed protocol deviates from the EPA Ground-Water Monitoring Guidelines in several other ways. Because the half-life of prometon is >1 year, the protocol should specify continuation of monitoring for more than 2 years. The protocol is unacceptable until the necessary changes are made.

Due to the registrant's problems in securing a suitable site for the retrospective monitoring study, it seems advisable to wait for the new prospective study (protocol) which is to be conducted on a site purchased by the registrant.

8. RECOMMENDATIONS:

Because no suitable retrospective sites are presently available, it appears advisable to waive the original retrospective monitoring study protocol and to evaluate the new prospective study protocol to be submitted by January, 1991. After review of the new prospective protocol by the Ground-Water Section, an EFGWB/registrant meeting should be scheduled to discuss details.

9. BACKGROUND:

Prometon is a non-selective preemergence and postemergence industrial herbicide used for weed control on non-crop land at a rate of 10 to 60 lbs. ai/AC. The high rate is used on Johnson-grass, Bermuda-grass bindweed and wild carrot. Prometon is an s-triazine which is stable, persistent and mobile similar to other triazines, e.g., simazine. Moisture is required to move the chemical into the root zone.

10. DISCUSSION:

In lieu of an unacceptable field dissipation study, which did not define depth of leaching, a small-scale retrospective monitoring study was required by the Ground-Water Technology Section on 6/1/88.

In a telephone conversation with the registrant on 11/21/90, it was learned that there is no available site for the proposed ground-water study. It appears that the registrant will have to purchase a site and change the study from a retrospective to prospective. The registrant's representative indicated that they have a draft prospective protocol and will submit the new protocol to EFGWB in about four weeks.

The registrant's representative indicated that early 1992 is the proposed starting date for the new prospective study.
Unconfirmed reports (STORET, 1988) indicate that prometon was found in 36 of 746 ground-water samples collected at 250 ground-water locations in 12 states. The maximum concentration was 250 ppb.

The EPA Pesticides in Ground Water Data Base Interim Report, 1988, indicates that prometon was found in ground water at the maximum concentration of 29.6 ppb; the average residue concentration was 16.6 ppb. A Texas well water monitoring study in 1987/88 documented finding prometon residues in Knox County Texas at the 1.9 to 29.6 ppb level.
<table>
<thead>
<tr>
<th>Name of Characteristic</th>
<th>Prometon Characteristics</th>
<th>Charact. of some pesticides known to leach (S. Cohen et al, 1984)</th>
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<tbody>
<tr>
<td>Kd</td>
<td>0.4 to 2.9 in 5 soils from sand to silty clay loam in texture and containing 0.8 to 5.0% OM.</td>
<td>&lt; 5, usually less than 1 or 2</td>
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<tr>
<td>Koc</td>
<td>48 to 100</td>
<td>&lt; 300 to 500</td>
</tr>
<tr>
<td>Water solubility, mg/L</td>
<td>620 @ 20C</td>
<td>30</td>
</tr>
<tr>
<td>Henry's Law Constant (atmos/mol)</td>
<td>9.10 x 10^{-7}</td>
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<tr>
<td>Photolysis, half-life, days</td>
<td>In water, &gt;&gt; 30</td>
<td>7</td>
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<tr>
<td>Photolysis, half-life, days</td>
<td>357 days on a sandy loam at 25C</td>
<td>14 or 21</td>
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<tr>
<td>Hydrolysis rate, half-life days</td>
<td>&gt; 365 days</td>
<td>175</td>
</tr>
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<td>* trigger factors</td>
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### Data Review Record

**United States Environmental Protection Agency**  
**Office of Pesticide Programs**  
**Washington, DC 20460**

**Data Review Record**  
Confidential Business Information - Does not contain National Security Information (E.O. 12065)

- **Pack Number**: 49351  
- **Date Received**: 5-24-89

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<th>1. Product Name</th>
<th>Chemical Name</th>
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<td>663</td>
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<td>B. Crompton</td>
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<td>8/30/89</td>
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**Instructions**  
Protocol for review

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**This Section Applies to Review of Studies Only**

- **Check Applicable Box**  
  - Adverse 6(a)(2) Data (405)  
  - Generic Data (Reregistration)(660)  
  - Special Review Data (870)  
  - Product Specific Data (Reregistration)(655)

- **15. No. of Individual Studies Submitted**

- **16. Have any of the above studies (in whole or in part) been previously submitted for review?**  
  - **Yes** (Please identify the study(ies))  
  - **No**

- **17. Related Actions**

<table>
<thead>
<tr>
<th>18. To</th>
<th>Type of Review</th>
<th>19. Reviews Also Sent to</th>
<th>20. Data Review Criteria</th>
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<td>SAC-PC</td>
<td>A. Policy Note No. 31</td>
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<td></td>
<td>Toxicology/HFA</td>
<td>TOX/HFA-PL</td>
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**Confidential Statement of Formula**  
(EPA Form 8570-4) Attached (Trade Secrets)  
**Label Attached**

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EPA Form 8570-17 (Rev. 11-88)  
Previous editions are obsolete.  
White - Data Coordinator  
Yellow - Data Review Section  
Pink - PM/RM/DCI  
Green - Return with completed review