Shaughnessy No.: 059101
Date Out of EAB: MAR 11 1985

To: Jay Ellenberger
   Product Manager 12
   Registration Division (TS-767)

From: Samuel Creeger, Chief
   Review Section #1
   Exposure Assessment Branch
   Hazard Evaluation Division (TS-769)

Attached, please find the EAB review of...

Reg./File #: 464-358

Chemical Name: Chlorpyrifos

Type Product: Insecticide

Product Name: Lorsban

Company Name: Dow

Purpose: Response to prev. review.

Action Code(s): 616

EAB #(s): 5313

Date Received: 2/4/85

TAIS Code: 67

Date Completed: 3/11/85

Total Reviewing Time: 0.7 days

Deferrals to:

   ______ Ecological Effects Branch
   ______ Residue Chemistry Branch
   ______ Toxicology Branch
1. **CHEMICAL:** Chlorpyrifos  
   0,0-Diethyl-O-(3,5,6-trichloro-2-pyridyl) Phosphorothioate.  
   Lorsban 4E, Lorsban 15G, Lorsban 50W

2. **TEST MATERIAL:** None

3. **STUDY/ACTION TYPE:** Soil Photodegradation Study

4. **STUDY IDENTIFICATION:**
   4.1 Experiment 78-2: Review completed on 2/2/84.
   4.2 Yankovich, P.R. and J.H. Miller. 1984. Photodegradation of  
      Chlorpyrifos on Commerce Soil Surface. Agricultural Chemicals  
      Review completed on 11/14/84.

5. **REVIEWED BY:**
   Typed Name: Emil Regelman  
   Title: Chemist  
   Organization: EAB/HED/OPP  
   Signature:  
   Date: 3/11/85

6. **APPROVED BY:**
   Typed Name: Samuel Creeger  
   Title: Chief  
   Organization: Review Section #1 EAB/HED/OPP  
   Signature:  
   Date: MAR 11 1985

7. **CONCLUSIONS:**
   The photolysis on soil data requirement has not yet been totally  
   satisfied.

8. **RECOMMENDATIONS:**
   Copies of the 2/2/84 and 11/14/84 reviews are appended to this  
   review, and may be forwarded to the registrant for their review.  
   The Registrant should be requested to address all specified  
   deficiencies.
9. **BACKGROUND:**

   **A. Introduction**

   On 2/2/84 EAB reviewed a study (see §4.1, above) of the photodegradation of chlorpyrifos on soil. That study was found to have been incomplete, and additional (apparently omitted) data was requested. To date, the registrant has not responded to this review.

   On 11/14/84, EAB reviewed a second study of the photodegradation of chlorpyrifos on soil (see §4.2, above), and likewise identified a number of deficiencies which, to date, have not been addressed.

   The current submission (appended to this review) contains a rebuttal discussion by P.J. McCall which, unfortunately, does not address any of the deficiencies noted in the two EAB reviews.

   **B. Directions for Use**

   See previous reviews.

10. **DISCUSSION OF INDIVIDUAL TESTS OR STUDIES:**

   **A. Study Identification**

   See previous reviews.

   **B. Materials and Methods (Protocols)**

   1. Test Method

      a. Description of Protocol, etc.
      b. Description of Chemical method used.

   **C. Reported Results**

   **D. Study Author's Conclusions/Quality Assurance Measures**

   **E. Reviewer's Discussion and Interpretation of Study Results**

11. **COMPLETION OF ONE-LINER:**

    No additional data have been added to the ongoing one-line data summaries.

12. **CBI APPENDIX:**

    The document appended to this review may be considered by the registrant to be CBI, and should thus be treated as such.
R. F. Bischoff  
9008 Building  

cc: H. J. Dishburger, 9001 Building  
P. R. Yackovich, 9001 Building  
D. A. Laskowski, 9001 Building  

EPA REVIEW OF CHLORPYRIFOS PHOTODEGRADATION STUDY  

Attached are our comments regarding this review. In essence, we feel that the study performed complies with the letter of the guidelines and that the degradation of chlorpyrifos in soil has been characterized in other work and need not be studied any further.

P. J. McCall  
Environmental Chemistry  
Agricultural Products Dept.  
9001 Building  

Attachment
Page 5 is not included in this copy.

Pages 5 through 10 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.