

US EPA ARCHIVE DOCUMENT

Shaughnessy No. 005101

Date Out of EAB: SEP 4 1987

To: Robert J. Taylor  
Product Manager #25  
Registration Division (TS-767C)

From: Emil Regelman, Supervisory Chemist  
Review Section #3  
Exposure Assessment Branch  
Hazard Evaluation Division (TS-769C)



Attached, please find the EAB review of...

Reg./File # : 464-502  
Chemical Name: Picloram  
Type Product : Herbicide  
Product Name : \_\_\_\_\_  
Company Name : DOW CHEMICAL USA  
Purpose : Amendment to add use on fallow grainland. Review of spray drift data, comments on groundwater monitoring protocol and other environmental fate data.

Date Received: 3/23/87 ACTION CODE: 305

Date Completed: \_\_\_\_\_ EAB #(s) : 70444

Monitoring study requested: \_\_\_\_\_ Total Reviewing Time 5.0 day

Monitoring study voluntarily: \_\_\_\_\_

Deferrals to: \_\_\_\_\_ Ecological Effects Branch  
\_\_\_\_\_ Residue Chemistry Branch  
\_\_\_\_\_ Toxicology Branch

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1. CHEMICAL: Picloram (4-amino-3,4,5-trichloropicolinic acid)
2. TEST MATERIAL: Study No. 1- Tordon 225E (picloram triisopropanolamine-1.0 lb. acid equivalent per gallon)
3. STUDY ACTION TYPE: Request to amend label to include use on fallow grainland. Review of spray drift data and comments on protocols for groundwater monitoring studies. Other studies submitted in response to the registration standard were not reviewed or have been reviewed previously.
4. STUDY IDENTIFICATION:

Studies reviewed at this time:

Grumbles, J.B., and W.G. Wright. 1980. Deposition of herbicides from fixed-winged aircraft. Dow Chemical U.S.A., March 3, 1980 (EPA Acc. No. 266004)

Comments on "Protocol for a Groundwater Monitoring Study". Dow Chemical Letter of March 10, 1986.

Review of the following studies is being deferred until the FRSTR is addressed.

Fontaine, D.D., and K.B. Woodburn. 1986. Photodegradation study of picloram on Catlin soil surface. Prepared and submitted by Dow Chemical U.S.A., Midland, MI. Acc. No. 261884.

Stafford, L.E. and J.H. Miller. 1986. <sup>14</sup>C Picloram rotational crop study Prepared and submitted by Dow Chemical U.S.A., Midland, MI. Acc. No. 261882.

Woodburn, K.B. 1986. The hydrolysis of picloram isooctyl ester in buffered distilled water. Prepared and submitted by Dow Chemical U.S.A., Midland MI. Acc. No. 265998.

Woodburn, K.B., and D.D. Fontaine. 1986. The photolysis of picloram isooctyl ester in dilute aqueous solution. Prepared and submitted by Dow Chemical U.S.A., Midland, MI. Acc. No. 266017.

Woodburn, K.B., D.D. Fontaine, and E.L. Bjerke. 1986. The photolysis of picloram in dilute aqueous solution. Prepared and submitted by Dow Chemical U.S.A., Midland, MI. Acc. No. 266005.

The following study has been reviewed previously. See EAB #6693, February 4, 1987.

Oliver, G.R., E.L. Bjerke, and R.L. Gantz. 1986. Field dissipation and leaching study Grazon P + L herbicide. Prepared and submitted by Dow Chemical U.S.A., Midland, MI. Acc. No. 266009.

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5. REVEIWEED BY:

Arthur Schlosser  
Chemist  
EAB/HED/OPP

Signature: Arthur O. Schlosser

Date: September 3, 1987

6. APPROVED BY:

Emil Regelman  
Supervisory Chemist  
Review Section #3, EAB/HED/OPP

Signature: Emil Regelman

Date: SEP 4 1987

7. CONCLUSION: See Section 10 Discussion and attachments.

8. RECOMMENDATIONS: The decision on the proposed label amendment to allow use of picloram on fallow grainland is being deferred until the FRSTR for this chemical is completed because of heavy review workload in EAB. The review of all of the data submitted except the spray drift data and the comments on the groundwater protocol will also be deferred until the FRSTR is completed. One study, on groundwater monitoring, has been reviewed previously (see EAB# 6639, 2/4/87). See attached comments on spray drift by Dr. Holst and comments on groundwater protocol by Matthew Lorber.  
EAB will retain the hard copies of all data which were not reviewed at this time and also the spray drift data.

9. BACKGROUND: The picloram registration standard identified many data gaps, including spray drift data and groundwater monitoring data. The registrant has submitted the following studies so far: Hydrolysis of picloram isooctyl ester, photolysis of picloram in water, photolysis of picloram isooctyl ester in water, photodegradation of picloram on soil surfaces, rotational crop studies, spray drift data, groundwater monitoring data and comments on groundwater monitoring protocols. The registrant is also requesting an amendment to add the use of picloram on fallow grainland to the label.

10. DISCUSSION OF INDIVIDUAL TESTS OR STUDIES: Because of the current heavy workload in EAB and the scheduled FRSTR for picloram (Branch due date 5/27/88) only the spray drift data and the comments on groundwater monitoring protocols are reviewed at this time. Review of all other data will be deferred until the FRSTR is completed; any decision on whether to allow the proposed use on fallow grainland will also be deferred until the FRSTR is completed. The groundwater monitoring study has already been reviewed (See EAB# 6693).

Spray drift data: See attached review by Dr. Robert W. Holst, Ph.D., July 23, 1987.

Groundwater monitoring protocol comments: See attached comments of Matthew Lorber (and other relevant attachments) to Allan Evans dated April 7, 1987. A recommendation is made to waive the previous requirement for a retrospective monitoring study pending submission and approval of a prospective monitoring study

11. COMPLETION OF ONE-LINER: Not applicable.

12. CBI APPENDIX: Not applicable.