

8/3/87

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Shaugh. No. 090501

EAB Log Out Date: AUG 25 1987

To: D. Giamporcaro  
Review Manager 79  
Registration Division (TS-767)

From: Matthew Lorber, Acting Team Leader *ML*  
Ground Water Team  
Exposure Assessment Branch, HED (TS-769)

Attached, please find the environmental fate review of:

Reg./File No.: 199107

Chemical: Alachlor

Type Product: Herbicide

Product Name: Lasso

Company Name: Monsanto

Submission Purposes: Review of well monitoring survey  
protocol amendments

Action Code: 870

Date In: 6/22/87

EAB#: 70794

Date Completed: 8/25/87

Total Reviewing Time: .2

Monitoring study requested: x

Monitoring study voluntarily:       

Deferrals To:

       Ecological Effects Branch

       Residue Chemistry Branch

       Toxicology Branch

(1)

REVIEW OF AMENDMENTS TO WELL MONITORING PROTOCOL

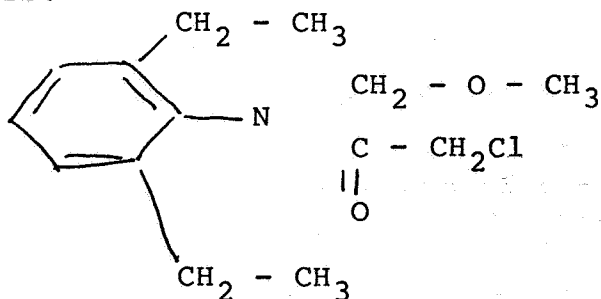
1. CHEMICAL:

Chemical name: 2-Chloro-2'6'diethyl-N-(methoxymethyl)-  
acetanilide

Common name: Alachlor

Trade name: Lasso

Structure:



2. TEST MATERIAL:

Not applicable

3. STUDY/ACTION TYPE:

Review of amendments to well monitoring protocol

4. STUDY IDENTIFICATION:

Title: Letter from Andrew Klein to Director, Registration  
Division (TS-767c), attn: Mr. Robert Taylor dated  
June 15, 1987, and three attached protocols along  
with the July 25, 1986 RTI protocol

Attachments: 87-24-R-10A  
87-24-R-10B  
87-24-R-10C

Author: Monsanto Agricultural Company  
700 Chesterfield Village Parkway  
St. Louis, MO 63198

Identifying No: 090501

Submitted by: A.J. Klein

Issue Date: June 15, 1987

Accession No: N.A.

Reference Number: 199107

5. REVIEWED AND APPROVED BY:

Matthew N. Lorber, Acting Team Leader  
Ground Water Team/EAB/HED

Matthew Lorber Date 8/25/87

6. CONCLUSIONS:

The amendments submitted adequately reflect agreements reached between Monsanto and the EPA. These concerns were summarized in letters dated 4/1/87 and 6/2/87. These letters are attached for reference.

7. RECOMMENDATIONS:

Retain the Monsanto protocol for future reference. One copy will be retained in EAB's files.

8. BACKGROUND:

The original protocol was submitted on July 25, 1987. In review of that original protocol by Stuart Cohen, he recommended that the protocol be accepted, although he also asked for clarification on some aspects of the protocol, including the proposed handling of temporal variations in the well sampling. Following a series of meetings and correspondences, the final protocol was approved, as indicated in the attached letter, dated 6/2/87.

9. DISCUSSION:

All issues have been resolved concerning monitoring design. I might caution that Monsanto has stated, on p. 6 of protocol amendment #87-24-R-10C, that "Every attempt will be made to deliver the final package to the EPA by 1 December 1989". This contrasts the letter sent to Monsanto on Apr. 1, which states, "You must submit RTI's final report along with any of your own interpretations or analyses by December 1, 1989, or you will be subject to receipt of a Notice of Intent to Suspend the registrations of your alachlor products."

APR 1 1987

CERTIFIED MAIL

Mr. Stephen R. Muench  
Registration Manager  
Monsanto Company  
1101 17th Street, N.W.  
Washington, D.C. 20036

Dear Mr. Muench:

On February 3, 1987, you responded to the Agency's request of December 15, 1986, for clarification of several points in your well water protocol. The Agency accepts your responses, with the two exceptions discussed below, and finds the well water survey protocol acceptable.

The Agency expects that resolution of the remaining inquiries will not further delay commencement of the well water survey. We expect that, pursuant to the schedule which you submitted on February 3, 1987, phase I of the survey will commence within 30 days of receipt of this letter.

The Agency takes exception to the length of your proposed schedule for submission of these data. You have set out a 34 month schedule for submission of the results of the survey to the Agency. The Agency will allow until December 1, 1989, 32 months from the date of this letter, for submission of the survey results. The Agency finds no reason why the final report of your contractor, Research Triangle Institute (RTI), should be retained by you for four months prior to its submission to the Agency. Two months is an adequate time for you to review the RTI report. You must submit RTI's final report along with any of your own interpretations or analyses by December 1, 1989, or you will be subject to receipt of a Notice of Intent to Suspend the registrations of your alachlor products.

The Agency also requires additional clarification of the temporal stratification model in your protocol. The Agency inquired in its letter of December 15, 1986, whether sample counties would be classified according to the height of the water table, in addition to vulnerability and alachlor use

levels. If the counties are classified according to these three factors, the first stage strata would be increased from 6 (3 stages of vulnerability x 2 stages of use) to 18 (6 x 3 stages of water level). It is also possible that the height of the water table could simply be an observation variable, rather than an additional stratification variable. Your use of temporal stratification must therefore be clarified in writing within 30 days of receipt of this letter.

On March 17, 1987, Mr. Frank Serdy and Mr. Lyle Gingerich met with Mr. David Giamporcaro of my staff and inquired whether RTI must report the owner and location of each well sampled in the well water survey. The Agency will accept identification of the wells by county and well number. However, with respect to each well, the Agency requires that the following information be provided:

- ° depth of the well;
- ° depth of the water table;
- ° proximity of the well to an alachlor-treated field, or a corn/soybean field;
- ° gradient with respect to the treated field.

This information is essential to the Agency's assessment of the results of the well water survey, and must be reported for each numbered well.

The Agency expects that Monsanto will now proceed to initiate the well water survey and will provide a clarification on the temporal stratification model within 30 days. The final report, including RTI's report and any Monsanto analyses, is due by December 1, 1989. If you have any questions, please contact Mr. David Giamporcaro at (703)557-0481.

Sincerely,

Janet Auerbach, Chief  
Special Review Branch

cc: Lyle Gingerich

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

OFFICE OF  
PESTICIDES AND TOXIC SUBSTANCES

Dr. Andrew J. Klein  
Monsanto Company  
1101 17th Street, N.W.  
Washington, D.C. 20036

JUN 2 1987

Dear Dr. Klein:

I am in receipt of your letter dated May 19, 1987, concerning the protocol for the Monsanto well water survey. You have satisfactorily addressed the Agency's concerns regarding the two remaining aspects of the protocol about which there was some question, namely, temporal stratification and determination of the depth of sampled wells.

Accordingly, this letter represents the Agency's approval of the Monsanto protocol for the alachlor well water survey. You are required to submit the protocol amendment to which you refer in your letter within ten days of receipt of this letter, and must begin the survey within 30 days of receipt of this letter. You are reminded that the final report of the results of the well water survey must be submitted to the Agency on or before December 1, 1989.

To reiterate the agreement reached between Monsanto and the Agency concerning the issues listed above, you have agreed that each of the three sub-surveys (in which wells will be sampled at times corresponding to high, medium, or low ground water levels) will oversample for high-use/high-vulnerability counties. This will ensure that the oversampling of high-use/high-vulnerability counties in the overall survey will also be reflected in each sub-survey. You also agreed to use the same methodology for obtaining data on the depth of sampled wells as will be used in the National Pesticide Survey pilot study.

If you have any questions, please contact David Giamporcaro of my staff at (703)557-0481.

Sincerely,

*Janet L. Auerbach*  
Janet Auerbach, Chief  
Special Review Branch

cc: Lyle Gingerich  
Matt Lorber  
Bob Taylor

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