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

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MEMORANDUM

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

SUBJECT: **Acetochlor 1st Quarterly Report of June 30, 1994**

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THRU: Henry Jacoby, Chief
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Henry Jacoby 1/17/95

TO: Robert Taylor
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The purpose of the progress report is to provide OPP with an update of ARP activities in compliance with the conditional registration of acetochlor; this submission meets the requirement.

The ARP June 30, 1994 Quarterly Report gives a general overview of activities in the following areas:

1. Summary of Conditional Registration Requirements
2. Summary of meetings with EPA/EFGWB
3. ARP structure
4. Summary of meetings with States about the (ground water) State Monitoring Program
5. Outline of ARP presentation to states on the (ground water) State Monitoring Program
6. Analytical method development

Many of these issues have been resolved since June 30, 1994 in meetings between the ARP and EFGWB's Acetochlor Response Team (ART), and are discussed in minutes of these meetings, subsequent quarterly reports, and reviews by the ART. Comments below address issues or questions raised in the progress report.

1. Summary of Conditional Registration Requirements

This section summarizes, in general, the conditions of the registration of acetochlor. Important details were left out of several descriptions (for example for acetochlor, "if a pattern of movement has occurred **that can be limited to a geographical area or soil type** [previous text in bold omitted], the ARP is required to revise the product label"). The official registration agreement states (not this progress report which contains inaccuracies) describes the terms and conditions attached to the registration of acetochlor.

2. Summary of meetings with EPA/EFGWB

Only one meeting has taken place between the ARP and EPA at the time this quarterly report was prepared. The minutes of this meeting (4 May 1994) were submitted to EPA, reviewed, and subsequently revised by the ARP. The following action items are identified in this report (They have been followed up on in subsequent discussions with the ARP):

1. The ARP and Agency will inform one another of requests information or standards of acetochlor. **AGREED**

2. The Agency informed the ARP that the method validation would be expedited by EPA's Bay St. Louis Lab. **VALIDATION WAS EXPEDITED**

3. The ARP was informed of a request by AWWA for involvement in the surface water monitoring program. **THEY ARE INVOLVED**

4. Must surface water sampling locations be strictly limited to 25 per state? Can Ohio also be included ? **OK TO USE WATERSHED APPROACH, AND TO INCLUDE OHIO.**

5. ARP requests to split the 8 prospective ground water studies, initiate 4 in 1995, and 4 in 1996. **AGREED**

3. ARP structure

No comments on this section.

4. Summary of meetings with States about the State Monitoring Program (ground water only).

Some interesting issues arose in these early meetings between the ARP and the states. Because of some apparent confusion on the part of the states as to their role and responsibilities in developing the State Monitoring Programs, EPA held a teleconference call with the major use states on September 6, 1994. In this call, EPA tried to clarify the purpose of this monitoring program, and to respond to questions from the states. Subsequent discussions occurred between the ARP and the States, which are described in later submissions.

The registration agreement states that:

> *"The ARP shall agree on the timing, design, and issues related to the analytical methods and the monitoring programs (not to exceed 25 wells per state) with the State Lead Pesticide Agency in the seven major use states as provided in this section."*
>
> *"The ARP shall provide EPA with quarterly status reports on its negotiations with the States."*
>
> *"The ARP shall make status reports on the status of these programs to the EPA, beginning in February 1995."*

The intent of these conditions was to provide States which comprise the major acetochlor use area with the opportunity 1) to determine how to evaluate the impact of pesticides on water quality, and 2) to obtain monitoring results. The ARP and the States had several rounds of discussions on these topics, subsequent to the initial meeting reported on here. EPA's role in this State Monitoring Program was to ensure that the States understood that the purpose of the monitoring was to provide an "early warning system" of feedback on water quality to both States and EPA. Although interpretation of these studies may be complicated by differences between the design of each state monitoring plan, this is offset by the advantages offered by serious state input into design of these monitoring programs.

EPA has received one quarterly report in addition to this one (Sept 1994). EPA will try to assure that both the ARP and the States have reached agreement, and will address outstanding issues in a meeting with the ARP.

5. Outline of ARP presentation to states on the State Monitoring Program (ground water only).

This presentation is very preliminary. More detailed comments will be provided in reviews of subsequent submissions.

6. Analytical method development.

The ARP must develop 3 analytical methods as a condition of registration:

1. adaptation of EPA method 505 (multi-residue method)
2. an acetochlor specific method

3. an ELISA method

These requirements were discussed in more detail in subsequent meetings, and in our review of the minutes of those meetings (c.f. minutes of 6-15-94 meeting). The multi-residue method has been validated by EPA. EPA responded to the ARP with comments and recommendations on the method detection limit and identification of interferences.

The registration agreement states:

> *" The ARP commits to providing a multi-residue method for acetochlor, and will also make ELISA methods available to the States to ensure that cost effective monitoring can be accomplished".*

Page 19 of this quarterly report (section 3.5.3) states:

> *"both Zeneca and Monsanto have expertise in the chemical synthesis of haptens, immunization and assay development. However, neither company has the facilities or experience in developing a commercial assay"*
>
> *"assay development will take at least two years"*
>
> *"it is not possible to define probable detection limits for such kits (methods)"*

Subsequent discussions with the registrant have also dealt with these issues. The registrant is responsible for developing analytical methods that can be disseminated to the public and that can be used to analyze water samples for acetochlor at levels which trigger a regulatory response, as described in this agreement (at least as low as 0.1 ppb). The ARP has also subsequently proposed that they might evaluate commercially available ELISA methods in lieu of developing such a method independently. This will be clarified in subsequent discussions between the ARP and EPA.