

JUL 8 1988

Ms. Karen Shearer
Rhone-Poulenc, Inc.
P.O. Box 125
Monmouth Junction, NJ 08852

Dear Ms. Shearer:

We have received Rhone-Poulenc's revised protocols for the Small Scale Prospective Ground Water Monitoring Study with Acifluorfen dated March 10, 1988 which were sent in response to the Comprehensive Data Call In Notice for Acifluorfen dated August 25, 1987 and your request for a time extension for a Small Scale Retrospective Ground Water Monitoring Study.

The protocols for the Small Scale Prospective Study have been accepted with the changes as listed in Attachment A. The Agency emphasizes that this is a research study, the intent of which is to establish trends in acifluorfen's movement in the soil profile and its possible impact on shallow ground water.

Your request for a time extension for the small scale retrospective ground water monitoring study depends on how quickly site selection is made. Agency and company personnel will make the final site selections based upon discussion of the usage and initial site selection data. After these data have been screened, a meeting will be scheduled with the registrant to discuss the site selection for the small-scale retrospective study. Depending upon how quickly site selection is made, the study may be initiated earlier than Spring 1989. At this time, the Agency does not intend to extend the starting date of the study for 1 full year.

If you have any questions regarding this letter please
contact Betty Crompton (703) 557-2558 or Geraldine Werdig (703)
557-7436.

Sincerely yours,



Edwin F. Tinsworth, Director
Registration Division

cc: Mr. Jack Graham
Manager, Registration
BASF Corporation
100 Cherry Hill Road
Parsippany, NJ 07054

ATTACHMENT A

1. The site chosen was accepted based upon verbal descriptions during previous meetings. In order to verify the suitability of the site, soil characterization information should be submitted to the Agency as soon as possible. The points previously discussed regarding site suitability included: a slope less than or equal to 2%; a homogeneous soil profile of sandy loam to sandy soil without confining clay lenses; a depth to the water table of less than 30 feet. These points are reemphasized here and data supporting the historical information on the site, as to depth to the water table, soil profile characteristics, and slope, should be included in the interim report.
2. The number of well clusters is adequate. Five well clusters will be installed in keeping with the minimum (3) of the study design.
3. As a point of clarification, there will be 16 soil cores collected per sampling interval, 4 per subplot. These will be composited in the laboratory down to 4 composites, 1 per subplot consisting of 4 cores per composite. This is adequate in keeping with the study design.
4. Soil cores will be collected in 30 cm (1 foot) increments to 60 cm and then in 60 cm (2 feet) increments to a depth of 480 cm (16 feet). This is adequate for the deeper sampling and number of soil cores to be taken.
5. The soil sampling schedule is adequate.
6. The suction-lysimeter sampling schedule needs clarification. There will be sampling at 0.5 months after application, then monthly with the ground-water samples until the 6 month point. Additional samples will be taken in between the monthly samples from 0.5 months through the 6 month point. The timing of these additional samples will be dependent upon rainfall events greater than or equal to 0.5 inches. That is, additional samples will be taken within a week after a rainfall event of 0.5 inches or greater. In the absence of such a rainfall event, an additional sample will be collected during regularly scheduled irrigation events along with the monthly suction-lysimeter samples. This effectively doubles the number of suction-lysimeter samples to be collected within the first 6 months of the study, at a minimum. (Table 1 uses wording indicating that additional samples will be collected, "at 0.5 and 6 months". It should read, "at 0.5 through 6 months".)

7. The ground-water sampling schedule is adequate up to the 6 months point. After 6 months and beginning with the second round of Spring sampling in April 1989, sampling bimonthly may need to be stepped up to monthly sampling. The data from the first 6 months of sampling should be assessed first to see if this is necessary. At the risk of sounding arbitrary, monthly sampling is called for in the study design. However, bimonthly sampling may be adequate based upon a review of the first 6 months' sampling data.
8. Study duration will be discussed at interim points during the study. The study will continue until trends or patterns of acifluorfen's movement in the soil profile and potential for reaching shallow ground water are established. The points in the protocol regarding termination of sampling will be discussed as the data are analyzed and submitted to the Agency for review; however, meeting any one of the single points mentioned will not be cause for study termination without Agency review of the data and discussion of the data with the registrant.
9. The study is designed to provide valuable data on acifluorfen's potential impact on shallow ground water and should be considered a research effort. That is, arbitrary stopping points will only inhibit this reaearch project.