

US EPA ARCHIVE DOCUMENT

File

20-A  
REVIEW NO.

SHAUGHNESSEY NO.  
111601

EEB BRANCH REVIEW

DATE: IN 5-22-84 OUT JUL 18 1984

FILE OR REG. NO. 707-145, 707-174

PETITION OR EXP. PERMIT NO.

DATE OF SUBMISSION 5-17-84

DATE RECEIVED BY HED 5-21-84

RD REQUESTED COMPLETION DATE 7-25-84

EEB ESTIMATED COMPLETION DATE 7-18-84

RD ACTION CODE/TYPE OF REVIEW 305/Amendment

TYPE PRODUCT(S): I, D, H, F, N, R, S Herbicide

DATA ACCESSION NO(S).

PRODUCT MANAGER NO. R. Mountfort (23)

PRODUCT NAME(S) Goal 1.6E : 707-174

Goal 2E : 707-145

COMPANY NAME Rohm and Haas Company

SUBMISSION PURPOSE Proposed changes in use and labeling including

deletion of "specific environmental hazards"

labeling

SHAUGHNESSEY NO. CHEMICAL, & FORMULATION % A.I.

111601 Oxyfluorfen

1

Goal

100 Submission Purpose

100.1 Submission Purpose

Rohm and Haas Company proposes to make various label changes for both Goal 1.6E and Goal 2E. The change that relates to EEB is the proposed deletion of the "Soybean - Specific Environmental Hazards" statement:

"This product is highly toxic to freshwater clams, oysters, aquatic invertebrates and aquatic plants. Do not apply Goal 1.6E (or 2E) where visible erosion to aquatic habitats and/or wetlands occurs."

This statement is separate from the general label Environmental Hazards statement which reads:

"Do not apply directly to water. Do not contaminate water by cleaning of equipment or disposal of wastes."

This product is highly toxic to aquatic invertebrates, aquatic plants, wildlife and fish. Use with care when applying in areas frequented by wildlife or adjacent to any body of water or wetland area. Do not apply when weather conditions favor drift or erosion from target areas."

100.2 Formulation Information

Goal 1.6E is 19.4% oxyfluorfen  
Goal 2E is 22.6% oxyfluorfen

101 Hazard Assessment

Rohm and Haas Company proposes to delete the specific environmental hazards labeling for soybeans. They claim the 2 year field monitoring study they conducted justifies such a change. The field study was designed to determine the fate of oxyfluorfen when applied to agricultural land at various locations. The study lasted 2 years. The first year goal was applied to 6 different agricultural fields each of which drained into a pond. The second year only 2 of the 6 fields were treated. To determine the fate of oxyfluorfen, samples of runoff water, soil in the path of runoff water, pond water and pond sediment were taken and analyzed for oxyfluorfen residues. In the first year, only one of the study sites showed evidence of oxyfluorfen moving to the pond. This site, D-213, was described as prone to severe erosion and thus not typical. The samples from the second year did not show any evidence of oxyfluorfen transport, but site D-213 was not one of the sites used. See EEB DER dated 6/14/84 and EAB review dated 6/29/83.

See attached EAB review 6/29/83

2

The field study was validated as supplemental by EEB because the report incompletely described the study. When additional data have been submitted, the study results will be reinterpreted. However, until these data are available EEB assumes the study shows that when soil erosion occurs oxyfluorfen will transport from a treated area to an adjacent water body and will end up in the sediment. In light of this, EEB considers that the study not only fails to support the proposed deletion, rather it vividly supports the restricting statement as it appears.

### 103 Conclusions

EEB has considered the registrant's proposed to remove the specific soybean environmental hazard statement. Based on the results of the field study, environmental fate data and toxicity information EEB does not concur with the proposed deletion and considers that such a deletion would increase hazards to aquatic organisms.

*Daniel Rieder 7/18/84*  
Daniel Rieder  
Wildlife Biologist  
Section 2

*Norman Cook 7-18-84*  
Norm Cook, Section Head  
Section 2  
Ecological Effects Branch

*Clayton Bushong*  
Clayton Bushong, Branch Chief  
Ecological Effects Branch  
Hazard Evaluation Division