

245516
RECORD NO.

121001
SHAUGHNESSEY NO.

31
REVIEW NO.

EEB REVIEW

DATE: IN 05-23-89 OUT MAY 30 1989

FILE OR REG. NO. 89-AR-07

PETITION OR EXP. NO. _____

DATE OF SUBMISSION 05-16-89

DATE RECEIVED BY EFED 05-23-89

RD REQUESTED COMPLETION DATE 06-06-89

EEB ESTIMATED COMPLETION DATE 06-06-89

RD ACTION CODE/TYPE OF REVIEW 510

TYPE PRODUCT(S) Herbicide

DATA ACCESSION NOS. _____

PRODUCT MANAGER NO. D. Stubbs (41)

PRODUCT NAME(S) Poast (Sethoxydim)

COMPANY NAME State of Arkansas

SUBMISSION PURPOSE Proposed Sec. 18 for use on
green beans

SHAUGHNESSEY NO.	CHEMICAL AND FORMULATION	% AI
<u>121001</u>	<u>Sethoxydim</u>	
_____	_____	_____
_____	_____	_____
_____	_____	_____

EEB REVIEW

Chemical: Poast (Sethoxydim)

100 Submission Purpose and Label Information

100.1 Submission Purpose and Pesticide Use

The State of Arkansas is requesting an emergency exemption (Section 18) for the use of Poast herbicide to control Johnsongrass in green beans. No new data were submitted with this request.

100.2 Formulation Information

Active Ingredient:

Sethoxydim	18%
Inert Ingredients	82%

Contains 1.5 lb ai per gallon.

100.3 Application Methods, Directions, Rates

- Maximum rate of 0.1875 lb ai per acre may be used
- Make only one application per season
- Do not apply within 30 days of harvest
- May be applied by ground or air

100.4 Target Organism

Target organism is Johnsongrass.

100.5 Precautionary Labeling

Environmental Hazards

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

101 Hazard Assessment

101.1 Discussion

The proposed emergency exemption would allow the use of Poast herbicide on 4,000 acres of green beans in Arkansas. Maximum application rate is 1 pint of product (0.1875 lb ai) per acre, with one application allowed. Application will be made between May 15, 1989 and July 31, 1989.

101.2 Likelihood of Adverse Effects on Nontarget Organisms

Data from previous EEB reviews indicate that sethoxydim is practically nontoxic to mammals, birds, and freshwater fish, and

no more than slightly toxic to aquatic invertebrates. The low use rate will result in residues of less than 50 ppm on terrestrial dietary food items. Direct application to water at the maximum proposed rate would result in an aquatic EEC of less than 0.10 ppm, substantially less than that expected to adversely affect aquatic fauna. Given an environmental half-life of less than four days in both soil and water, sethoxydim is not expected to cause any adverse effects in nontarget fauna.

101.3 Endangered Species Considerations

On the basis of low toxicity to mammals, birds, fish, and aquatic invertebrates, hazard to endangered species of animals is not expected from the proposed use. The only organisms at risk would be nontarget plants. Review of EEB's Endangered Species files indicates that there are two endangered plant species listed for Arkansas: Geocarpon minimum and pondberry. Of these two species, only pondberry is found in habitats which might be exposed to agricultural pesticide application.

The submission package does not provide sufficient information to allow EEB to conduct a hazard assessment for this endangered plant species. More detailed information on counties containing green bean acreage, and the location of that acreage, is needed before hazard can be determined. EEB defers to the US Fish and Wildlife Service on this matter. Application of Poast herbicide to green beans under this Section 18 should not be authorized until the USFWS, Jackson, Mississippi Office, has reviewed potential hazard to endangered plant species under this proposed exemption.

101.4 Adequacy of Toxicity Data

The existing database is adequate to assess hazards to nontargets under the proposed exemption.

103 Conclusions

EEB has reviewed the proposed emergency exemption for the use of Poast herbicide on green beans in Arkansas. EEB concludes that the proposed use will not result in hazard to nontarget fauna.

One endangered plant species may be exposed to the herbicide via application to green beans. EEB cannot assess the potential for hazard to this plant species with information currently at hand. EEB will defer to the FWS Regional Office in Jackson, Mississippi on this matter. Application under this proposed exemption should not be authorized until FWS has been notified and has had the opportunity to conduct an endangered species review.

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