

244178, 244179  
RECORD NO.

121001  
SHAUGHNESSEY NO.

29  
REVIEW NO.

EEB REVIEW

DATE: IN 05-03-89 OUT MAY 8 1989

FILE OR REG. NO. 89-IL-07, 89-TN-06

PETITION OR EXP. NO. \_\_\_\_\_

DATE OF SUBMISSION 03-29-89, 03-31-89

DATE RECEIVED BY EFED 04-28-89

RD REQUESTED COMPLETION DATE 05-11-89

EEB ESTIMATED COMPLETION DATE 05-11-89

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 States of Illinois and Tennessee

SUBMISSION PURPOSE Proposed Sec. 18's for use on  
snap 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 States of Illinois and Tennessee are requesting emergency exemptions (Section 18's) for the use of Poast herbicide to control Johnsongrass (Illinois) and annual and perennial grasses (Tennessee) in snap beans. No new data were submitted with these requests.

100.2 Formulation Information

Active Ingredient:

Sethoxydim . . . . .	18%
Inert Ingredients . . . . .	82%

Contains 1.5 lb ai per gallon.

100.3 Application Methods, Directions, Rates

Illinois: Application rate is 1.5 pints (0.28 lb ai) per acre, combined with one percent of a crop oil concentrate. For the best postemergence control of Johnsongrass, one application should be made before the Johnsongrass reaches 25 inches in height and prior to the bloom stage of the beans. Allow at least 30 days prior to harvest. Follow all present label restrictions for Poast.

Tennessee: Poast will be applied by ground equipment at a rate of one gallon per eight acres (0.19 lb ai/acre).

100.4 Target Organisms

Target organisms are Johnsongrass in Illinois, annual and perennial grasses in Tennessee.

101 Hazard Assessment

101.1 Discussion

The proposed emergency exemptions would allow the use of Poast herbicide on 3,000 acres of snap beans in Illinois and 6,100 acres of snap beans in Tennessee. Maximum application rate is 1.5 pints of product (0.28 lb ai) per acre in Illinois, and 1 pint of product (0.19 lb ai) per acre in Tennessee, with one application allowed. Acreage to be treated is found in Clark and Crawford Counties in Illinois, and statewide in Tennessee. Exemption period is June 10 through August 15 in Illinois, and May 1 through July 31 in Tennessee.

## 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 70 ppm on terrestrial dietary food items. Direct application to water at the maximum proposed rate would result in an aquatic EEC of less than 0.15 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 might be nontarget plants.

Review of EEB's Endangered Species files indicates that there are no endangered plant species listed for the two subject counties in Illinois. A number of plant species are listed for Tennessee. However, due to the restricted nature of their habitats, none of these species will be exposed to pesticides applied to snap beans. Thus, hazard to endangered plants is not anticipated from use under the proposed exemptions.

## 101.4 Adequacy of Toxicity Data

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

## 103 Conclusions

EEB has reviewed the proposed emergency exemptions for the use of Poast herbicide on snap beans in Illinois and Tennessee. EEB concludes that the proposed use will not result in hazard to nontarget organisms, including endangered species.

*Allen W. Vaughan* 5.8.89  
Allen W. Vaughan, Entomologist  
Ecological Effects Branch  
EFED (H7507C)

*Norman J. Cook* 5.8.89  
James W. Akerman, Chief  
Ecological Effects Branch  
EFED (H7507C)

*Norman J. Cook* 5.8.89  
Norman J. Cook, Supervisory Biologist  
Ecological Effects Branch  
EFED (H7507C)