111601 SHAUGHNESSY NO.

EEB REVIEW

DATE: IN 03/17/86 OUT 28 MAR 1986

FILE OR REG. NO. 86-WI-09

PETITION OR EXP. PERMIT NO.

DATE OF SUBMISSION 03/06/86

DATE RECEIVED BY HED 03/14/86

RD REQUESTED COMPLETION DATE 03/31/86

EEB ESTIMATED COMPLETION DATE 03/31/86

RD ACTION CODE/TYPE OF REVIEW 510

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

DATA ACCESION NO(S).

PRODUCT MANAGER NO. D. Stubbs (41)

PRODUCT NAME(S) GOAL 1.6E

COMPANY NAME State of Wisconsin

SUBMISSION PURPOSE Proposed section 18 for use on horseradish in Wisconsin

SHAUGHNESSY NO. CHEMICAL & FORMULATION % AI

111601 Oxyfluorfen 19.4%
Goal (oxyfluorfen)

100 Submission Purpose and Label Information

100.1 Submission Purpose and Pesticide Use

The State of Wisconsin is requesting an emergency exemption (section 18) for the use of Goal herbicide on horseradish. No data were submitted with this request.

100.2 Formulation Information

ACTIVE INGREDIENT:
Oxyfluorfen . . . . . . . . . . . . . 19.4%

100.3 Application Methods, Directions, Rates

General Information

GOAL 1.6E is a selective herbicide recommended for preemergence application to horseradish for control of certain broadleaf weeds. Initial spray applications should be made preemergence to horseradish. It may be desirable to cultivate immediately prior to application to remove germinated weeds and to cover emerging horseradish.

Dosage

Apply 2.5 pints of GOAL 1.6E herbicide (0.5 pounds active ingredient) per acre preemergence to horseradish.

Timing and Method of Application

For best preemergence control of susceptible weeds, apply GOAL 1.6E just prior to emergence of horseradish.

GOAL 1.6E should be thoroughly mixed with clean water, at recommended concentrations, and applied in a minimum of 40 gallons of water per acre. Use conventional ground spray equipment with flat fan spray nozzles, at 20 to 40 psi. Accurately calibrate spray equipment prior to each use. Avoid drift to all other crops and nontarget areas. Thoroughly flush the spray equipment (tank, hose, pump, boom) with water before and after each use. Residual GOAL 1.6E remaining in spray equipment may damage other crops.
Cultural Considerations

In order to provide maximum preemergence weed control, the soil surface should be smooth and free of excessive trash (clippings, dead weeds, etc.). Rain or irrigation is not necessary immediately following application; however, preemergence weed control is best when application is followed within 2 weeks by rainfall.

Cultural practices which result in redistribution or disturbances of the soil surface after spraying will destroy the herbicidal effectiveness of the treatment. Cultivations that mix untreated soil in treated areas will also reduce the effectiveness of the treatment. The best results from GOAL 1.6E are from applications on established beds which are left undisturbed during the time period for which weed control is desired.

Use Restrictions

- Do not apply more than 0.5 lb active (2.5 pints) per acre of GOAL 1.6E during one use season.
- Do not apply GOAL 1.6E within 60 days of harvest.
- Read and observe all label directions before using.
- Do not mix GOAL 1.6E with oils, surfactants, liquid fertilizers, or other pesticides.
- Do not contaminate irrigation water or water used for domestic purposes.
- Do not apply GOAL 1.6E when weather conditions favor drift. Avoid drift to all nontarget areas. GOAL 1.6E herbicide is phytotoxic to plant foliage.
- Do not use any plants treated with GOAL 1.6E for feed or forage.
- Do not feed or graze animals on any areas treated with GOAL 1.6E herbicide.
- GOAL 1.6E should be applied only by ground application equipment.
- Thoroughly flush spray tank with water before and after each use. Residual GOAL 1.6E herbicide remaining in tank mix may damage other crops.
- Use GOAL 1.6E herbicide only for recommended purposes and at recommended rates.

- Do not rotate any crops other than cotton, onions, soybeans, or spearmint/peppermint within a 10-month period after treatment.

- Do not treat ditchbanks or waterways with GOAL 1.6E herbicide.

100.4 Target Organisms

GOAL 1.6E will provide preemergence control of the following weeds when applied at the recommended dosage.

| Common lambsquarters       | Chenopodium album         |
| Common purslane            | Portulaca oleracea        |
| Pennsylvania smartweed     | Polygonum pensylvanica    |
| Redroot pigweed            | Amaranthus retroflexus    |
| Shepherdspurse             | Capsella bursa-pastoris   |

101 Hazard Assessment

101.1 Discussion

If the exemption is approved, an estimated 575 acres of horseradish will be treated. The primary area of production is in the northwest part of Wisconsin in Eau Claire County.

101.2 Likelihood of Adverse Effects on Nontarget Organisms

On the basis of data in the Ecological Effects Branch (EEB) files, Goal is low to moderate in toxicity to birds and mammals and moderate to high in toxicity to fish and aquatic invertebrates. Thus, use of this product could result in potential hazard to aquatic organisms. However, in view of the limited acreage to be treated (575 acres), the proposed use is not expected to result in adverse effects on nontarget aquatic organisms.

101.3 Endangered Species Considerations

Adverse effects on endangered/threatened species are not anticipated from the proposed use.

103 Conclusions

EEB has completed review of the proposed emergency exemption for the use of Goal on horseradish in Wisconsin.
Based upon information from previous branch reviews, and considering the limited acreage to be treated, EEB concludes that use under the proposed section 18 is not expected to result in adverse effects on nontarget organisms.

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