

US EPA ARCHIVE DOCUMENT

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ECOLOGICAL EFFECTS BRANCH

FILE OR REG. NO. 241-243

PETITION OR EXP. PERMIT NO. _____

DATE DIV. RECEIVED _____

DATE OF SUBMISSION _____

DATE SUBMISSION ACCEPTED _____

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

DATA ACCESSION NO(S). _____

PRODUCT MGR. NO. Taylor (25)PRODUCT NAME(S) Prowl HerbicideCOMPANY NAME American Cyanamid CompanySUBMISSION PURPOSE Incremental risk assessment of proposeduse on sunflowers

CHEMICAL & FORMULATION _____

Pendimethalin

Pesticide Name

PROWL

100 Pesticide Label Information

100.1 Pesticide Use

Prowl is currently registered for use on field corn, cotton and soybeans as a post-emergence herbicide. The proposed registration would add the use of Prowl to control weeds in sunflowers

100.2 Formulation Information

Pendimethalin -- 42.3% EC formulation, 4 pounds of pendimethalin/gallon.

100.3 Application Methods, Directions, Rates

See Appendix.

101 Physical and Chemical Properties

See the EEB review by L. Touart (5/13/80).

102 Behavior in the Environment

See the EEB review by W. Rabert (10/23/79).

103 Toxicological Properties

See the EEB review by W. Rabert (10/23/79).

104 Hazard Assessment

104.1 Discussion

Sunflowers in the United States are commercially grown primarily in the Dakotas, Minnesota and California. Total acreage is somewhat over 500,000 acres.

104.2 Likelihood of Adverse Effects to Non-Target Organisms

The use of Prowl to control weeds in sunflowers is not expected to significantly increase the hazard to non-target organisms over currently registered uses. The active ingredient in Prowl, Pendimethalin, is slightly toxic to terrestrial vertebrates and is not expected to approach toxic levels in the feedstuff of these animals when label directions are followed and applications are fully incorporated. Pendimethalin is highly toxic to aquatic organisms. The environmental mobility of Pendimethalin, though

still uncertain, is not expected to allow significantly greater quantities of the compound to enter aquatic environments than those entering from current usage. Therefore, the incremental risk to non-target organisms of Prowl use on sunflowers is expected to be below levels of concern.

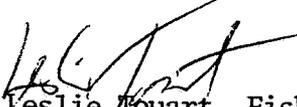
104.3 Endangered Species Considerations

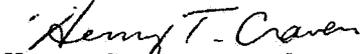
The use of Prowl to control weeds in sunflowers is not expected to adversely affect any federally listed endangered species.

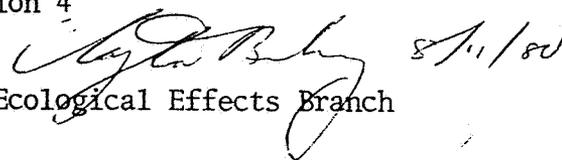
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Conclusions

The Ecological Effects Branch concurs with the proposed label amendment to Prowl for the new use on sunflowers.

 4/11/80
Leslie Fouart, Fisheries Biologist, Section 4


Henry Craven, Head, Section 4

 8/11/80
Clayton Bushong, Chief, Ecological Effects Branch

Pendimethalin ecological effects review

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- Identity of product inert ingredients
 - Identity of product impurities
 - Description of the product manufacturing process
 - Description of product quality control procedures
 - Identity of the source of product ingredients
 - Sales or other commercial/financial information
 - A draft product label
 - The product confidential statement of formula
 - Information about a pending registration action
 - FIFRA registration data
 - The document is a duplicate of page(s) _____
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