

4-25-77

EFE BRANCH REVIEW

DATE: IN \_\_\_\_\_ OUT \_\_\_\_\_ IN \_\_\_\_\_ OUT \_\_\_\_\_ IN 4-18-77 OUT 4-25-77  
FISH & WILDLIFE ENVIRONMENTAL CHEMISTRY EFFICACY

Accession Nos.: 227648, 227649

FILE OR (REG. NO.) 241-243

PETITION OR INP. PERMIT NO. \_\_\_\_\_

DATE DIV. RECEIVED 1-27-77

DATE OF SUBMISSION 1-27-77

DATE SUBMISSION ACCEPTED \_\_\_\_\_

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

PRODUCT MER. NO. 25 Bob Taylor

PRODUCT NAME(S) Prowl herbicide

COMPANY NAME American Cyanamid Co.

SUBMISSION PURPOSE Addition of PPI-TKMX, PE-TKMX, and PPI-PE sequential  
w/metribuzin.

CHEMICAL & FORMULATION \_\_\_\_\_

Prowl: ([N-(1-ethypropyl)-3, 4-dimethyl-2, 6-dinitrobenzenamine (43.8%)  
4# ai/gallon

1  
70

200.0 Introduction:

200.1 Uses:

Refer to attached use sheets.

200.2 Background information:

Prowl herbicide is presently registered for PPI and preemergence use in soybeans. American Cyanamid is now requesting registration a PPI Prowl/metribuzin tank mix, a preemergence Prowl/metribuzin tank mix and a PPI Prowl treatment followed by a sequential metribuzin treatment. Identical rates are recommended for all three of the above mentioned uses.

200.2.1 Factors affecting amount/type of data required:

- a) From previously reviewed data (E.P.A. letter of 4/14/76) the following claims were accepted for the PPI and PE Prowl/metribuzin tank mixes:
  - 1) Weeds controlled at each recommended rate except the 0.5#ai + 0.25#ai/A Prowl plus metribuzin rate were: those weeds controlled by Prowl alone plus velvetleaf, Pennsylvania smartweed, common ragweed, jimson weed, mustards spp., venice mallow, prickly sida, and suppression of cocklebur.
  - 2) Crop injury and yield data submitted were acceptable at each maximum recommended rate for both tank mixes.
- b)
  - 1) From a later EEEB review dated 8/16/76, claims for aerial application of the PPI Prowl/metribuzin tank mix and the PPI - PE sequential treatment were accepted. All weeds presently listed on the PPI tank mix and PPI - PE sequential labels were controlled at each recommended rate. Phytotoxicity and yield were also determined acceptable at the maximum recommended rates. No drift data were required at that time.
  - 2) Incorporation of Prowl/metribuzin by 1/4 inch rainfall within 7 days following treatment was determined acceptable.

201.0 Data summary:

201.1.1 Brief description of tests:

Efficacy, crop injury, and yield data from ground treatments were submitted comparing the PPI tank mix, the PE tank mix, and the PPI - PE sequential treatment. Comparability was noted in the data submitted regardless of rate used. Some early crop injury was noted following treatment, however, the soybeans outgrew this initial injury by harvest. No drift data were submitted for the proposed aerial PE tank mix treatment.

201.1.2 Data summaries:

Refer to E.E.E.B. files

202.0 Conclusions:

202.1 Claims supported by the data submitted

- a) Efficacy data submitted will support comparable weed control of the PPI tank mix, the PE tank mix and the PPI - PE sequential treatment.
- b) Weeds previously accepted for the PPI tank mix and the PE tank mix are: all weeds controlled by Prowl alone plus velvetleaf, Penn. smartweed, common ragweed, jimsonweed, mustard spp., Venice mallow, prickly sida, and suppression of cocklebur at each recommended rate except the lowest tank mix rate of 0.5#ai + 0.25#ai/A on coarse soils. This rate has been increased in this submission to 0.75#ai + 0.25#ai/A on coarse soils. *At 0.75#ai + 0.25#ai/A on coarse soils* the data submitted and referenced will support control of all label claimed weeds except mustard spp.; and will support suppression of cocklebur.
- c) Efficacy data submitted and referenced for the PPI - PE sequential treatment will support control of all label claimed weeds except mustard spp.; and will support suppression of cocklebur.
- d) Comparability was established among the PPI tank mix, the PE tank mix and the PPI - PE sequential treatment when applied with ground application equipment. In a previous review, EEEB determined that the PPI tank mix and the PPI - PE sequential treatment were comparable when applied aerially. Therefore, no efficacy, crop injury, or yield data are required for the proposed PE tank mix treatment applied aerially.

- e) Crop injury and yield data submitted for the PPI tank mix, the PE tank mix, and the PPI - PE sequential treatment will support use of the maximum recommended rates. Early crop injury was noted, however, this initial crop injury did not adversely affect subsequent yields.

202.2 Claims not supported by the data submitted:

- a) Efficacy data submitted and referenced will not support control of mustard spp. at the minimum recommended rate of 0.75# ai + 0.25# ai/A Prowl plus metribuzin on coarse soils.
- b) No drift data were submitted in support of the proposed PE - tank mix applied aerially.

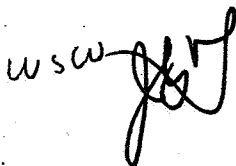
202.3 Additional data required to support registration:

- a) Submit additional efficacy data to support control of "mustards (Brassica spp.)" at 0.75# ai + 0.25# ai/A Prowl plus metribuzin on coarse soils applied PPI - TM, PE - TM, and PPI - PE sequential, or delete this claim.
- b) Submit drift data in support of the proposed PE tank mix aerial treatment, or delete this claim. Refer to "Interim Drift Procedures" enclosed.

203.0 Label comments - to be resolved prior to registration:

- a) Efficacy data submitted and referenced will only support control of Pennsylvania smartweed (Polygonum pensylvanicum). If "mustards (Brassica spp.)" is to be claimed, each Brassica species must be supported by efficacy data.
- b) Revise common ragweed "(Ambrosia spp.)" to read common ragweed (Ambrosia artemisiifolia).
- c) Label must indicate that the 50WP Sencor and Lexone formulations are recommended.

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