MEMORANDUM


FROM: Kenneth W. Dockter, Chemist
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

THRU: Charles L. Trichilo, Ph.D., Chief
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

TO: Robert J. Taylor, PM# 25
Registration Division (TS-767)

American Cyanamid Company is requesting an amended registration for PROWL® to permit application through sprinkler irrigation systems in cotton, field corn, grain sorghum, peanuts, soybeans, and sunflowers. Such use in potatoes has already been approved.

Tolerances for the combined residues of the herbicide pendimethalin (N-(1-ethylpropyl)-3,4-dimethyl-2,6-dinitrobenzenamine) and its metabolite 4-((1-ethylpropyl)amino)-2-methyl-3,5-dinitrobenzyl alcohol have been established in or on corn (grain, i.e., field), cottonseed, peanuts, potatoes, sorghum grain, and soybeans at 0.1 ppm and sunflower seeds at 0.01 ppm (40 CFR 180.361).

Petitions requesting tolerances for residues of pendimethalin in or on dry garlic and onion bulbs, grapes, and tomatoes are pending.

Pendimethalin formulated as PROWL® (an emulsifiable concentrate containing 42.3% active ingredient (4 lb ai/gal)) is currently registered for use on all the RACs proposed in this petition.

With the proposed amended registration allowing application through sprinkler irrigation systems in cotton, field corn, grain sorghum, peanuts, soybeans, and sunflowers, PROWL® will be applied in a metered constant flow into the water during the irrigation period. All PROWL® label recommendations for these crops regarding rates/A, application timing, and restrictions will be followed. The application of PROWL® is to be made in 1/2-3/4 inches of irrigation water.
There was no submission of residue data. Considering that pendimethalin is a preemergence herbicide, there is no reason to anticipate an increase in residue levels in or on corn grain, cottonseed, peanuts, potatoes, sorghum grain, soybeans, and sunflower seeds as a result of applying pendimethalin via sprinkler herbigation systems.

Conclusion and Recommendation

The established tolerances of 0.1 ppm for corn grain, cotton seed, peanuts, potatoes, sorghum grain, and soybeans, and 0.01 ppm for sunflower seeds are adequate to cover any residues of pendimethalin which may occur as a result of the proposed amended registration. Therefore, RCB recommends for the amended registration.

cc: R.F., Circu., Reviewer: Amended Use, S.F. PROWL
RDI: RCB: A.A. Rathman: 8/14/84: R.D. Schmitt: 8/14/84