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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

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OFFICE OF
PESTICIDES AND TOXIC
SUBSTANCES

MEMORANDUM

To: Susan Lewis/Ben Chambliss, Product Manager 21
Fungicide/Herbicide Branch
Registration Division

From: E. Brinson Conerly-Perks
Environmental Fate and Ground Water Branch
Environmental Fate and Effects Division

E.B. Conerly-Perks
8/10/92

Through: Henry Jacoby, Chief
Environmental Fate and Ground Water Branch
Environmental Fate and Effects Division

Henry Jacoby

and

Akiva Abramovitch, Head, Chemical Review Section III
Environmental Fate and Ground Water Branch
Environmental Fate and Effects Division

Akiva Abramovitch

Subject: DP Barcodes 166999, 167002, 167010, 167012; EFGWB#s 91-0822 through -
0825: Terbuconazole Field Rotational Crop Data Requirement

Background: The applicant company is seeking a waiver of EFGWB's requirement for additional field rotational crop data. Also, they are proposing a 33 day replanting interval. At various times, they have submitted the following supporting material:

- 1) a field study which was deemed partially acceptable because the crop materials were only analyzed for parent terbuconazole. It demonstrated that terbuconazole was not found in crops planted ca. 120 days post treatment except for 0.11 ppm in wheat straw.
- 2) a confined study, done at 0.5 kg/ha (0.49 lb/A or 2 ppm), which is summarized on the attached sheet. This study was deemed acceptable. In this study it was found that most plantings made 122 and 273 days post-treatment contain total residues of 2-4 ppm, consisting mainly of water-soluble triazolyl derivatives. Wheat grain is the exception; it contains 35.4 ppm total residue and 25 ppm triazolylalanine in 122 day plantings.

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3) TOX Branch opinion that the water soluble triazolyl degradates need not be included in a tolerance statement for Terbuconazole in the human diet, based on the two following hypothetical cases:

i. a diet of 50% wheat seeds at a level of 6.66 ppm

ii. a diet of 10% barley seeds at a level of 40 ppm

In these two cases, they have calculated that the reference dose is not exceeded.

Conclusions:

- 1) At this time, EFGWB cannot concur with the proposed 33-day replanting interval because of the parent and organo-soluble degradates that were found in many confined crops at that period.
- 2) No data were generated between 29 and 122 days either in the confined or field study.
- 3) TOX Branch should determine whether the finding of the reported level of residue in wheat seeds at 120 days is of concern.
- 4) If TOX Branch determines that the 120 day residues are not of concern, EFGWB can agree to a 120 day replanting interval. In this case, no more data are required.

If the applicant wishes to recommend an interval shorter than 120 days, additional data must be provided. At that time TOX would need to make a determination relative to whatever level of residue was present at the tested interval.