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

MAR 29 1993

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Reregistration of Trifluralin. Registrant's Response to CBRS Review of Cottonseed Processing Study.
CBRS No. 11298. DP Barcode No. D187478. No MRID No.

FROM: Bonnie Cropp-Kohlligian, Environmental Scientist
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Chemistry Branch II: Reregistration Support
Health Effects Division [H7509C]

THRU: Andrew Rathman, Section Head
Special Review Section I
Chemistry Branch II: Reregistration Support
Health Effects Division [H7509C]

TO: Lois Rossi/Walter Waldrop [PM-71]
Reregistration Branch
Special Review and Reregistration Division [H7508W]

In a letter dated 1/27/93, DowElanco has responded to the conclusions reached by CBRS in the review of a previously submitted cottonseed processing study which was ultimately deemed inadequate to fulfill trifluralin reregistration requirements. CBRS (memo by B. Cropp-Kohlligian dated 9/29/92) previously concluded that the cottonseed processing study (1992; MRID 42354501) was not adequate to determine the possible concentration of trifluralin residues in commodities processed from treated cottonseed because trifluralin residues were nondetectable (<0.01 ppm) in cottonseed and all processed commodities and the exaggerated application rate used in the subject study (2.3X) was not equivalent to the maximum theoretical concentration factors demonstrated in the subject study for hulls (6X) or crude and refined oils (8X).

DowElanco contends that the study is acceptable and has provided several opinions/arguments to refute the conclusions reached by CBRS concerning the adequacy of the subject study. These opinions/arguments are taken from the registrant's letter of

1/27/93 and restated below in verbatim:

1. A study has been conducted and submitted at 3X the special use application rate (6X the conventional rate).

2. Application of trifluralin at rates higher than 3X will likely result in stunting of the growth of cotton plants and impact the yield of cotton.

3. Since trifluralin is preplant incorporated into the soil, 6-7 months prior to harvest, the only mechanism for residues to reach cottonseed is through plant uptake, and this [is]/known to not occur to any significant extent with trifluralin.

4. Even if a crop of cotton could be grown in soil treated at 8X the recommended rate, the residue would not exceed 0.01 ppm, and the tolerance for the RAC is 0.05 ppm.

After due consideration of the opinions/arguments provided by the registrant and upon further review of the original data submission (1992; MRID 42354501), CBRS concludes that residues in cottonseed processed products are not likely to exceed 0.05 ppm, which is the established tolerance level for residues of trifluralin in/on cottonseed (40 CFR 180.207). Furthermore, since the registrant asserts that the application of trifluralin at rates higher than 4.5 lb ai/A would likely be phytotoxic to cotton plants, CBRS will accept that an application of 4.5 lb ai/A is the highest practical exaggerated rate for cotton plants. Although less than the maximum theoretical concentration factor (8X) for cotton processed products, the highest practical exaggerated rate (2.3X) was employed in the subject study and resulted in no detectable residues in the RAC or processed commodities. CBRS, therefore, concludes that the cottonseed processing study is adequate and that no food/feed additive tolerances need to be established on any cottonseed processed commodity (e.g., hulls, meal, soapstock, crude oil or refined oil).

RECOMMENDATIONS

CBRS has reassessed its previous conclusions concerning the submitted cottonseed processing study (1992; MRID 42354501) and now concludes that the cottonseed processing study is adequate and that no food/feed additive tolerances need to be established on any cottonseed processed commodities (e.g., hulls, meal, soapstock, crude oil or refined oil).

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cc: BLCKohlligian (CBRS), Trifluralin Reg. Std. File, Update File, Trifluralin SF, RF, Circulate (7).

RDI: ARathman:3/22/93 EZager:3/25/93

H7509C:CBRS:BLCKohlligian:CM#2:Rm 805:703-305-7462:3/9/93.