RCB

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

3353

JUN 26 1986

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: EUPs and temporary tolerances of 0.01 ppm of 1,3-Dichloropropene (Telone II) in or on almonds, cherries, citrus, grapes (including raisins), peaches, plum, and walnuts.
PP # 6G-3353 Caswell No. 3234 A
464-EUP-92 ; 464-EUP-93
Accession No. 261117

TO: Henry M. Jacoby, PM #21
Registration Division (TS-767C)

FROM: Quang Q. Bui, Ph.D., Quang Q Bui 6/18/86
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Hazard Evaluation Division (TS-769C)

THRU: Laurence D. Chitlik, D.A.B.T., 6/19/86
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Toxicology Branch/HED (TS-769C)

Registrant: Dow Chemical Co., 6/26/86
Midland, Michigan 48460

Related Petition: 6G-3352

1,3-Dichloropropene (Telone II) is currently registered as a preplant soil nematicidal fumigant. The registered uses were previously considered as nonfood uses since Telone II was applied to the soil prior to planting and residues in the crops were not expected. Thus, there are currently no tolerances established for 1,3-Dichloropropene.

However, available residue data suggest that as a result of its use, residues of 1,3-Dichloropropene and its metabolite 3-Chloroallyl alcohol may exist in raw agricultural commodities.

In this petition (PP #6G-3353), the registrant submitted 2 EUPs:

1. 464-EUP-92: To evaluate the control of plant parasitic nematodes and certain other soil inhabiting pests on almonds, citrus, cherries, grapes, peaches, plums, and walnuts when applied as a post plant injection treatment. Use would occur in the following States: Alabama, California, New Jersey, New York, North Carolina, Pennsylvania, South Carolina, and West Virginia. The maximum acreage to be treated will be 640 and the maximum amount of Telone II to be used will be 7,950 gallons.

2. 464-EUP-93: To evaluate the control of plant parasitic nematodes and certain other soil inhabiting pests on almonds, citrus, cherries, grapes, peaches, and walnuts when applied as a post plant irrigation water treatment. Use would occur in the following States: California, Arizona, and Texas. The maximum acreage to be treated will be 850 and the maximum amount of Telone II to be used will be 12,750 gallons.

Tolerances requestaed are 0.01 ppm for combined residues of 1,3-Dichloropropene and its metabolite 3-Chloroallyl alcohol in or on almonds, cherries, citrus, grapes (including raisins), peaches, plums, and walnuts.

RECOMMENDATION

This action is not toxicologically supported due to the lack of several toxicity studies as required by § 112-4 of the Pesticide Assessment Guidelines, Subdivision I, Experimental Use Permits (US.EPA 10/82; see "Toxicity Data Gaps" below). The calculated oncogenic risk for the proposed uses is $2.38 \times 10^{-6}$.

1. Calculated oncogenic risk for Telone II

Data from two oncogenic studies in rats and mice with Telone II conducted by the National Toxicology Program (NTP Project NTPTR 269, NIH Publication No. 85-2525, May 1985) revealed positive carcinogenic potential in both species and sexes. From these results, an oncogenic risk Q* of $1.75 \times 10^{-1}$ (mg/kg/day) has been determined by Toxicology Branch (memo of B. Fischer to H. Jacoby, dated 2/21/86).

The calculated oncogenic risk for the proposed tolerance at 0.01 ppm in or on almonds, cherries, citrus, grapes (including raisins), peaches, plum, and walnuts is:

| Food Factors | Tolerance | Telone II consumed mg/kg/day(a) | Risk(b) |
|---|---|---|---|
| All crops considered 5.45 % | 0.01 ppm | $1.36 \times 10^{-5}$ | $2.38 \times 10^{-6}$ |

(a) $\frac{1.5 \text{ kg food/day} \times 5.45\% \times 0.01 \text{ ppm}}{60 \text{ kg person}}$ = Telone consumed (mg/kg body weight/day)

(b) Telone consumed x risk [$1.75 \times 10^{-1}$ (mg/kg/day)]

2. Toxicity data gaps:

a. Subchronic feeding studies (2 studies required)
b. Chromosomal aberration study
c. Acute dermal and inhalation studies
d. Data from the first generation of an ongoind reproduction study

It should be noted that all the above data are required for all EUPs accompanied by temporary tolerances.

2. Residue Chemistry Branch's issue

RCB has recommended against this petition due to inadequate analytical information (see memo of J. Worthington to H. Jacoby, dated 5/1/86).