DATE: IN OUT IN 11/10/75 OUT 11/12/75 IN OUT

FISH & WILDLIFE ENVIRONMENTAL CHEMISTRY EFFICACY

FILE OR REG. NO. 241-238

PETITION OR EXP. PERMIT NO. PP5F1640

DATE DIV. RECEIVED 11-3-75 & 10-9-75

DATE OF SUBMISSION 11-3-75 & 10-9-75

DATE SUBMISSION ACCEPTED

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

PRODUCT MGR. NO. Gee (16)

PRODUCT NAME(S) Counter 15G

COMPANY NAME American Cyanamid

SUBMISSION PURPOSE

CHEMICAL & FORMULATION Terbufos granular

60 pages
1.0 Introduction

RegISTRANT submits rotational crop data in regard to registered use on corn EPA Reg. No. 241-238 with proposed label amendment deleting rotational crop restriction. Submission date is 10-9-75.

Applicant submits revised Section F of PP5F1640 regarding use of terbufos on sugar beets and refers to rotational crop residue data, as above, with the intent of deletion of label restriction on sugar beet label. Submission date is 10-9-75.

In our previous reviews of this chemical (F. J. Schenck, 9-22-75, PP5F1640 [sugar beets]) (R. W. Cook, 12-20-74, PP4F1496 [corn]), rotational crop residue data has been requested. In lieu of such data, a label restriction has been required. Applicant now has such data and is requesting deletion of rotational crop restriction from corn label (EPA Reg. No. 241-239) and proposed sugar beet label (PP5F1640). Current review is of the rotational crop data submitted 10-9-75 (EPA Reg. No. 241-239).

2.0 Directions for Use

EPA Reg. No. 241-238:

Delete the following

"All applications: Treated areas may be rotated to corn or soybeans without restriction. Do not rotate treated area for 365 days to any other crops. Cover crops may be planted in treated areas if not grazed and plowed under."

PP5F1640

Delete the above for sugar beet use also.

3.0 Discussion of Data

Rotational crop residue uptake studies, including some soil analyses, were conducted in five locations. Rotational crops include sugarbeet, red beet, snap beans, oats, and spring wheat. Analysis by adequate previously reviewed analytical procedure based on oxidation of parent and several metabolites to the oxygen analog sulfone.

Results:

No significant residues were found in any rotational crop residue sample.
<table>
<thead>
<tr>
<th>Crop</th>
<th>Residues (ppm)</th>
<th>Treatment to PHI Sampling Days</th>
<th>Treatment Rate</th>
<th>Interpreted (days)</th>
<th>PHI Sett</th>
<th>Beans</th>
<th>Roots</th>
<th>Tops</th>
<th>Wheat</th>
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**Note:** The table contains data on residues in rotation crops.
4.0 Recommendation

Petitioner has submitted data from 5 locations on the following rotational crops: sugarbeets, red beets, snap beans, oats and spring wheat. These data are to be used to support deletion of the crop rotation restriction. Based on the following we can go along with the deletion; crops contained less than 0.05 ppm when planted and harvested 17 to 56 days about 335 to 437 days after treatment.

[Signature] 11/13/75
Ronald E. Ney, Jr. 11/12/75

[Signature] 11/13/75
R. W. Cook 11/12/75

Environmental Chemistry Section
Efficacy and Ecological Effects Branch
SUBJECT:  

DATE: 7/2/75

FROM:

PM 16  
Coordinator, Chemical and Environmental Chemistry Review  
Section, Ecological Effects Branch

PM# 5F1640 has been filed proposing the use of Counter on sugar beets. A 70-15 review (as relates to soil persistence) is needed.

To meet petition deadlines, please complete and submit your review to the Chemistry Branch Office by 8/16/75 (45 DOL).

R. S. Quick  
Chemistry Branch  
Registration Division

Revised 11/11/75

Petitions have submitted data to show that residues are less than 0.05 ppm in related crops, sugar beets, red beets, etc., planting interval 12 to 60 days, harvest 12 to 56 days.

Data on rotational crops (e.g., beans) will support an interval of 1 year from application to planting. There are no data to support an interval earlier than one year. Data is being requested.

The following type restriction is suggested:

"Do not rotate treated area for one year following application except with crops listed on the label. "Cover crops may be planted in treated area in winter and not grazed."

There are similarities to those proposed for corn beets in corn fields.

Ronald E. Ney 7/12/75

See Attachment

Ronald Ney  
Environmental Chemistry Section  
E E E B
Revised opinion to chemistry branch
First opinion given 7/24/75
Revised 11/12/75
Counter 5F/1640

Petitioner has submitted data from 5 locations on the following rotational crops: sugarbeets, red beets, spinach, oats, and spring wheat. Residues to sampling (treatment to sampling 357 to 432 days) are less than 0.05 ppm. Crops were planted 17 to 56 days and then harvested. The data indicates that crops can be rotated without hazard of residues to rotational crops.

R. L. Neve 11/12/75
Ronald Ney
Environmental Chemistry Section
E E E E