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

OCT 6 1982

MEMORANDUM

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

Subject: PP#1F2620/2H5331. Chlorpyrifos on apples. Amendment of 8/11/82.

From: K.H. Arne Ph.D., Chemist KH Arne
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Thru: Charles L. Trichilo, Chief
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To: Jay Ellenberger, PM No. 17
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and

Toxicology Branch
Hazard Evaluation Division (TS-769)

In our most recent memo concerning this petition, we recommended against the proposed tolerance for chlorpyrifos on apples. For a favorable recommendation we required a revised Section F in which the following tolerances were proposed:

1.	apples	4 ppm
2.	apple pomace	30 ppm
3.	meat, fat and meat by products of goats, horses, and sheep	1.5 ppm

The petitioner had originally proposed a tolerance of 1 ppm for apples. Because of ADI considerations they wish to keep the tolerance for apples at 1 ppm. To accomplish this they have, with this amendment, increased the PHI from 14 to 28 days and imposed a 21 day waiting period between the final two applications. There are no residue data strictly representative of this newly proposed use.

Following is a summary of residue data most closely approximating this use:

location	Rate (lb a.i./A)	No. Application	Type Application	No days between Final 4 Appl	PHI (days)	Residue Found (ppm) Chlorpyrifos	TCP	Total
MI	2	7	dilute	26,15,14	28	0.24-0.58	ND-0.2	0.31-0.58
NY	2	9	dilute	9,7,8	25	0.66-0.77	ND-0.45	0.81-1.21
NY	2	9	conc	9,7,8	28	0.84-2.3	ND-0.31	0.84-2.35
NC	2	9	dilute	14,14,14	28	1.1	0.16	1.26
MI	0.6	10	dilute	14,12,6	28	0.07-0.16	<0.05	0.12-0.21
NY	2	7	dilute	12,14,12	28	0.31-0.37	<0.05-23	0.41-0.55
NY	2	7	conc	12,14,12	28	0.21-0.38	ND-0.28	0.31-0.51

Based on the available data we can make no conclusion as to the appropriateness of a 1 ppm tolerance. Since residues as high as 2.3 ppm were found at the proposed 28 days PHI (in the same field test residues at 35 days were up to 2.5 ppm), we suspect that a 1 ppm tolerance would not be adequate even if the interval between the last two applications was 21 days.

Recommendation

We recommend against the proposed tolerance. However, the petitioner has expressed a willingness to limit the use of chlorpyrifos on apples to an early season use in order to keep the tolerance level to 1 ppm (telecom, R. Bischof, Dow and R.S. Quick, RCB). We consider this to be a reasonable approach and suggest a use pattern in which the last application is made no later than two months before harvest.

TS-769:RCB:KArne:vg:CM#2:Rm810:X77377:10/4/82
cc: RF, Circ., Arne, Thompson, FDA, TOX, EEB, EFB, PP#1F2670/2H5331
RDI: Quick, 9/28/82; schmitt, 10/30/82

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