



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

MAY 6 1985

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM OF CONFERENCE 5/2/85

SUBJECT: PP#3F2884/FAP#3H5396; Chlorpyrifos and its ADI problems

FROM: Karl H. Arne, Chemist *K. Arne*
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

THRU: John H. Onley, Section Head *John H. Onley*
Tolerance Petition Section II
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

TO: RCB files

Attendees:

Bob Bischoff,	Dow Chemical
Dick Kosiba,	Dow Chemical
Ed Allen	RD
Gary Burin	SIS
Steve Saunders	TOX
Larry Chitlik	TOX
Russell Cook	RCB
Karl Arne	RCB

Existing uses for chlorpyrifos consume greater than 300% of the ADI, and Dow is exploring approaches to reducing concern over chlorpyrifos toxicity. Most of this conference was spent discussing questions of toxicology (Could a different safety factor be used? Should the NOEL be based on RBC or plasma cholinesterase inhibition?). Also, Dow has proposed tolerances for chlorpyrifos in which the level of chlorpyrifos, per se, is separately stated; these have been approved by RCB (see PP# 3F2884), but before they are useful toxicological studies on TCP (the regulated metabolite of chlorpyrifos) must be completed.

TOX pointed out that important exposures of chlorpyrifos result from use on citrus and from secondary residues in beef. RCB noted that actual residues in lean beef and orange juice were significantly lower than those in the RAC, and that this had been the subject of an earlier RCB memo (PP#2F2884, memo of 11/7/83, K. Arne). RCB gave TOX a copy of that memo so that they could use it for their calculations.

136

1/2

The consensus of EPA's toxicologists was that it would be difficult to change the NOEL and unreasonable to use a different safety factor for chlorpyrifos. They suggested that Dow continue in the attempt to separately specify the level of chlorpyrifos in the tolerance with the expectation that further studies on the metabolite TCP would show it to be of less toxicological significance than chlorpyrifos. TOX also suggested that additional processing studies might be helpful in establishing that the exposure to chlorpyrifos is lower than tolerances suggest.

TS-769:RCB:KHArne:kha:CM-2:Rm810:557-7377:4/9/85
CC:RF,Circ.,PP#3F2884
RDI: JHO, 5/3/85; RDS, 5/3/85