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

SEP 3 1987

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Alachlor (090501) -
RCB Concerns regarding OPPE recommendation
to cancel Alachlor uses on dry beans
[No. MRID No., No RCB No.]

FROM: Susan V. Hummel, Chemist
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THRU: Charles L. Trichilo, Branch Chief
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TO: Jim Roeloffs, Project Manager
Special Review Branch
Registration Division (TS-767)

Susan V. Hummel

RCB is concerned about OPPE's recommendation to cancel alachlor uses on dry beans. The OPPE recommendation is based on a risk/benefit formula incorporating a residue on uncooked dry beans reported by RCB and low dollar benefits reported by BUD.

The residue on uncooked beans reported by RCB is the maximum residue reported by the registrant at the maximum registered rate. Additionally, dry beans are always cooked before being consumed.

Cooking and/or canning of dry beans is expected to reduce the residues of alachlor in dry beans. These data have been requested and will be submitted in June, 1988. Although we do not have cooking and processing data for alachlor in dry beans, we can give some examples of reduction of alachlor residues in other types of processing in other crops. Alachlor residues are reduced 32% in the toasting processing for soybean meal. This process involves cooking with steam at high pressure and drying in an oven. The oil refining process reduces alachlor residues approximately 50% in each step, for a total reduction in alachlor residue of 75 - 90%. The oil refining process involves alkali treatment, filtering, and steam distillation.

Another possibility for the estimation of oncogenic risks is to use the average residue found in residue field trials. This is one option being examined by the RCB Residue Committee. Average residues had not been used in the Alachlor

Special Review because of limited residue and validation data. RCB decided to take a more prudent approach, conservatively estimating residues to be present at the maximum residue level found in field trials at the maximum registered rate. Now that adequate validation data have been submitted for dry beans, we could consider using the average residue level for dietary exposure estimation. The average residue found in dry beans is approximately one-third the maximum residue found and is not significantly different from background levels found in control samples.

Thus, with the high probability of alachlor residues being reduced in the normal cooking and canning of dry beans and the conservative approach, using of the maximum residue at the maximum application rate in the risk/benefit formula, we feel that the dietary exposure from dry beans may not be high enough relative to other uses to justify only cancellation of the alachlor use on dry beans.

cc: R. F., circo, S. Hummel, alachlor S.F., Alachlor S.R.F.,
PM#25, C. Monroe (SIS), OPPE, PMSD/ISB
RDI:EZ:09/03/87:RDS:09/03/87
TS-769:RCB:SVH:svh:RM810:CM#2:09/03/87