MEMORANDUM


FROM: Linda S. Propst, Chemist Dietary Exposure Branch Health Effects Division (TS-769C)

THRU: Richard D. Schmitt, PhD., Acting Chief Dietary Exposure Branch Health Effects Division (TS-769C)

TO: George LaRocca, PM 15 Insecticide-Rodenticide Branch Registration Division (TS-767C)

In a letter to George LaRocca dated 1/24/89, Karl H. Arne, EPA Region 10 has forwarded correspondence from Oregon State University which raises concerns over the use of OR-CAL Colloidal Lindane on turf grass grown for seed.

OR-CAL Colloidal Lindane, a product of Oregon-California Chemicals, Inc., is registered for use on turf grass grown for seed with the label restricting the seed to be used for food, feed or oil purposes. However, the label does not carry a restriction against the feeding of screenings, straw, etc. which are routinely pelletized and sold as animal feed.

Seeing the real potential for illegal lindane residues in animal feed and the subsequent possibility for illegal residues of lindane in meat and milk, an entomologist at Oregon State University has questioned the lack of restrictions against feeding grass foliage, forage, straw, or seed screenings when OR-Cal Colloidal Lindane has been used on turf grass grown for seed.

DEB's Comments

In the past Dietary Exposure Branch has classified use of a pesticide on turf grass as a non-food use, since the label
restrictions were to prohibit the grower from using the grass as an animal feed.

However, the recent incident in the Pacific Northwest where residues of pesticides registered for use on turf grass grown for seed were found in animal feed which has grass seed screenings as a component made it clear that this use can no longer be considered a non-food use.

The problem arises because the grass seed processors are not necessarily aware of the pesticides that were used on turf grass grown for seed nor of the label restrictions associated with those pesticides. The grass seed screenings and straw, etc. are then pelletized and sold as animal feed.

A more logical way to label turf grass uses which have been classified as non-food uses would be to restrict the pesticides use on grass grown for seed. In this way the grower, who should be aware of the label precautions, would know not to use a pesticide on grass which is being grown for seed. In those cases where removal of the label restriction is desired, labels containing directions for use on "grass grown for seed" would require data to determine pesticide residues in the seeds, screenings, straw and meat, milk, poultry and eggs and appropriate tolerances established. There are currently tolerances for residues of lindane in the fat of meat from cattle, goats, horses and sheep at 7 ppm and in the fat of meat from hogs at 4 ppm to cover dermal uses of lindane. There is no tolerance established to cover lindane residues in milk.

Dietary Exposure Branch has recommended [see memo dated 1/26/89 from Charles L. Trichilo, Chief to Anne Lindsay (RD) and Rick Tinsworth (SPRD)] that OPP implement a program to add the label restriction "Do not use on grass grown for seed" on all pesticides which have turf grass uses classified as non-food uses. In addition, uses on alfalfa, clover and small grains grown for seed should also be reevaluated. A Data call-in will be needed to address the older chemicals.

Conclusions and Recommendations

For OR-CAL Colloidal Lindane 400, Dietary Exposure Branch recommends that the label be revised to include the restriction "Do not use on grass grown for seed." to preclude the transfer of lindane residues to milk.

If the registrant wishes to retain the use on grass grown for seed, then residue data on grass, grass straw, and grass seed screenings will need to be submitted and appropriate tolerances
established. Establishing a milk tolerance or increasing meat
tolerances will require approval of Toxicology Branch.

cc: Reading File, Circulation, Subject File, Reviewer, PMSD/ISB
RDI: A. R. Rathman, 2/15/89; E. Zager, 2/15/89