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

# 40285-1

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

DATE: September 20, 1981

SUBJECT: Aluminum phosphide in orchards for rodent control

FROM: Edward Zager, Chemist
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

TO: Herbert Harrison
Chief, Insecticide Rodenticide Branch
Registration Division (TS-767)

THRU: Charles L. Trichilo, Branch Chief
Residue Chemistry Branch
Hazard Evaluation Division (TS-769)

The Insecticide-Rodenticide Branch, Registration Division has requested that we determine whether the use of aluminum phosphide in rodent burrows in orchards constitutes a non-food use.

The typical use involves placement of 2-4 Degesh Phostoxin Tablets-R into a burrow wadding newspaper in the burrow opening and then sealing the burrow with soil. The tablets weigh 3g each and liberate 1.0g of phosphine upon complete reaction with water.

Results of a study reflecting applications of 2-4 tablets per burrow in almond groves were submitted by T.P. Salimon of the University of California at Davis.

No detectable (<0.006 ppm) residues of $PH_3$ were found in almonds harvested 6 months after treatment. While we would prefer data from several different fruit orchards reflecting treatments closer to harvest than 6 months, the method of application and the extreme volatility of phosphine qualify the proposed use as a non-food use.

Conclusions

The use of aluminum phosphide in rodent burrows in orchards qualifies as a non-food use.

cc: Non-Food Use S.F.
Circu
Reviewer
Aluminim phosphide S.F.

TS-769:Reviewer:E.Zager:LDT:X77324:CM#2:RM:810:Date:9/20/81
RDI:Section Head:RJH:Date:9/17/81:RDS:Date:9/17/81