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

MAR 30 1993

OFFICE OF
PESTICIDES AND TOXIC
SUBSTANCES

MEMORANDUM

SUBJECT: 627. Fonofos. Request for Preliminary Toxicology Review of Significant Metabolites from Confined Accumulation Study on Rotation Crops

Shaughnessy No. 041701
Tox. Chem. No. 454B
Project No. D186857
Submission No. S433676

TO: Judy Loranger, PM Team # 73
Special Review and
Reregistration Division (H7508W)

FROM: Pamela M. Hurley, Toxicologist Pamela M. Hurley 3/25/93
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THRU: Roger L. Gardner, Section Head
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Background and Request:

ICI Agricultural Products has submitted an interim progress report for a Confined Accumulation Study on Rotation Crops with fonofos. The Registrant has requested that the Toxicology Branch (TB-I) supply an opinion on the toxicological significance of the major metabolites listed in the interim report. Methylphenyl sulfone ($MPSO_2$) and methyl 3-hydroxyphenyl sulfone (3-OH) are the major metabolites in all of the RAC's. Other metabolites include MPSO, 4-OH, oxon, glucose and unidentified components.

Toxicology Branch Response:

TB-I has discussed the request with the Chemistry Branch staff. The chemists have suggested that TB-I wait until the Chemistry Branch completes the review of the final report and verifies the metabolites and their concentrations. At that time, the Registrant's request may be referred to the Metabolism Committee for comments on the metabolites. TB-I has decided to follow the Chemistry Branch's suggestion. As a note, TB-I has the following metabolism data in the Branch files:

Chemical oxidation of fonofos with m-chloroperbenzoic acid yields o-ethyl-ethanephosphonothioc acid (ETP), o-ethylethanephosphonic acid (EOP), thiophenol and sulfur.

In vitro microsomal metabolism yields the oxon analogue, ETP, EOP & thiophenol.