



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

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

26 APR 1984

MEMORANDUM

SUBJECT: Addendum to Our Memo Dated Feb. 14, 1984, re: POAST
Herbicide

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

FROM: Samuel M. Creeger, Chief *SMC*
Section #1
Exposure Assessment Branch
Hazard Evaluation Division (TS-769)

THRU: Dr. David Severn, Chief *for DJS*
Exposure Assessment Branch
Hazard Evaluation Division (TS-769)

In response to your question (memo dated Aug. 8, 1983 to R. Taylor from L. Propst) of whether or not POAST residues will persist in soil after application to fallow land, it was indicated (review dated Feb. 14, 1984 to R. Taylor from S. Creeger) that detectable amounts of parent and the major degradation product could be present in some soils under field conditions up to one year post-application.

As an addendum to that response, the PM (R. Taylor) has asked that I include the fact that our rotational crop data show no uptake by rotational crops when planted about 30 days after an application of 0.893 lb ai/A (radiolabeled compound) to 1.0 lb ai/A (nonradiolabeled compound).

Also, another study involving soil, initially treated at 6 ppm radiolabeled active ingredient, and planted to summer wheat, carrots, green beans and lettuce at 1 and 2 months post-treatment, showed uptake of less than 0.07 ppm total ¹⁴C by the crops.

81
329

However, another 14C study involved planting of radishes and wheat in soil that was aged 120 days after treatment (at a rate not recorded in our evaluation).

At time of planting, the soil contained 0.12 ppm total 14C. When the radishes and wheat were harvested after 150 and 190 days of growth, respectively, the following residues were found:

<u>Plant</u>	<u>Residues (ppm)</u>
Radish leaves	0.03
Radish roots	0.02
Wheat grain	0.03
Wheat husk	0.15
Wheat straw	0.09
Wheat root	0.16

Analysis of the wheat husk and straw showed known degradation products to be the primary residues.

cc: Robert Taylor, RD