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

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JUN - 2 1989

MEMORANDUM

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

Subject: Azinphos-methyl (Guthion)
Identifying No. 11678-4
Tox Chem No. 374
Project No. 9-1388

From: John H.S. Chen, D.V.M. *John H.S. Chen 5/25/89*
Review Section I
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Health Effects Division (H7509C)

To: Dennis H. Edwards, PM 12
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Thru: Yiannakis M. Ioannou, Ph.D., Section Head *Y.M. Ioannou 5-25-89*
Review Section I
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and

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Review of the Registrant's Response to the Previous Toxicology Branch
Review Comments Concerning the Ames Test with Cotnion-M (Guthion) (LSRIL
Study No. MAK/141/AZN; May 6, 1987)

Registrant's Response: " In Table 1, the results of the preliminary test show that the highest range of the toxicity is between 25 ug and 125 ug. We use in our expression 'above the level of 125 ug' which should be understood as 'approximately 125 ug'." " With regard to the actual high dose selected ... concentrations of approximately 200 ug caused turbidity of the agar and the test could only be performed below this level. We found that by using the concentration of 160 ug as a higher level of the test, the conditions were optimal for both the toxicity and the turbidity." " At the concentration of 190 ug, the turbidity was still present and the toxicity was rather high. The results of an Ames test performed in such conditions would not reflect the true mutagenicity of the material."

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Reviewer's Comments: The provided supplemental information for selecting 160 ug/plate of Cotnion-M as the highest dose in this study is considered to be justified. We agree that among the criteria to be taken into consideration for determining the upper limits of Cotnion-M are cytotoxicity, solubility, or causing turbidity of the agar for this study.

Recommendation: The test compound, Cotnion-M, is not mutagenic in the Ames Salmonella/Mammalian Microsomal Mutagenicity Test at the dose levels tested (2 through 160 ug/plate). This study is upgraded to acceptable.

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