3-4-88

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

MEMORANDUM

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

Subject: Dimethoate Tumor Evaluation Tox Chem No. 328
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To: Reto Engler, Ph.D.
Chief, Mission Support Staff
Toxicology Branch/HED (TS-769C)

From: Joycelyn E. Stewart, Ph.D. 3/4/88
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Thru: Albin B. Kocialski, Ph.D. ABK 3/4/88
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American Cyanamid submitted a rat chronic/oncogenicity feeding study on Dimethoate in response to the Draft Registration Standard Data Call-In. The study was reviewed by Dynamac who concluded that administration of dimethoate was associated with a statistically significant increase ($p<0.015$) of combined hemangiomas and hemangiosarcomas at all sites(lymph node,spleen, kidney, and skin) in all dosed males. Based on these conclusions, as well as increased incidences of lung and liver tumors in the mouse study, the chemical was determined to be a candidate to be presented to the Toxicology Branch Peer Review Committee for evaluation of its oncogenic potential.

Subsequent to the receipt of the evaluation of the rat study, the registrant had an independent review of the pathology slides of the rat study only conducted by Dr. Robert Squire of Johns Hopkins University.

Dr. Squire's review of the slides resulted in a finding of a significant increase ($p<0.05$) in combined hemangiomas/hemangiosarcomas in spleen of high dose males only. EPA's conclusions regarding the mouse study are also being countered in a written narrative by the registrant.

As requested by you, I am forwarding the review by Dynamac scientists and Dr. Squire's report to Dr. Slaughter(EPA contract pathologist) for an independent evaluation. The CBI and/or slides can be made available to Dr. Slaughter, should he need to review the original data.

Since the pathologist is only available one day/week, six weeks seem to be a reasonable estimate of time in which to expect a report from him. An addendum to the "Weight of the Evidence" document will be written based on Dr. Slaughter's evaluation of the tumors. Since statistical analysis of the data will be required, it is expected that an additional two weeks will be needed to complete the addendum.

Therefore, assuming an initiation date of March 9, it is estimated that this phase of the re-review will be completed on or about May 9, 1988.

cc. Hank Jacoby, SIPS