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

SEP 26 1984

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: EPA Reg. #11273-22, 11273-45; Propetamphos; Clarification of rat teratology protocol
Caswell #: 706A

TO: William Miller
Product Manager (16)
Registration Division (TS-767)

THRU: Christine F. Chaisson, Ph.D. C.F. Chaisson 9/25/84
Head, Review Section IV
Toxicology Branch
Hazard Evaluation Division (TS-769)

FROM: William Dykstra, Ph.D. William Dykstra 9/5/84
Toxicology Brach
Hazard Evaluation Division (TS-769) for WBS 9/26/84

Background

The previosuly submitted teratology study in rats, which was a segment of the rat reproduction study, did not demonstrate maternal toxicity at the highest dose tested (20 ppm). A repeat of the rat teratology study according to present guidelines is required. Additionally, the registrant proposes to evaluate fetuses in greater detail than was previously performed.

The proposed examination regime for live fetuses is as follows:

1. Visceral examination:

   All live fetuses are dissected and the contents of the thoracic and abdominal cavities examined.

   In each litter the heart and both kidneys of all fetuses are fixed in 95% alcohol and examined under a binocular microscope after cutting.

   Additionally, the head of every second fetus (1, 3, 5) of these live fetuses is fixed in Bouin's fluid and examined by cutting the brain at different levels. Each sectioned head is stored singly in 4% formaldehyde.

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2. Skeletal examination:

   All live fetuses are stained with Alizarin Red-S solution and examined for skeletal abnormalities and stored litterwise in glycerin.

Conclusions and Recommendations:

1. The proposed examination procedure as stated in the registrant's letter of 12/21/83 is acceptable to Toxicology Branch.

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