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

MAR - 3 1988

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: EPA Reg. No.: 359-686 - Lindane: Registrant's request to revise the protocol for rabbit 90-day dermal toxicity study. Problems involved in conducting a 90-day dermal toxicity study at the Hazleton (UK) Laboratories.

TOX CHEM No.: 527
TOX PROJECT No: 8-0429
Record No.: 213507

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Mr. Charles A. O'Connor, III of the law firm McKenna, Conner and Cuneo acting on behalf of the Centre International d'Etudes du Lindane (CIEL) reports that the testing laboratory has not been able to complete a 90 day dermal toxicity study with lindane because of the occurrence of severe dermatitis and subcutaneous infections in the rabbits. The testing laboratory (Hazleton, UK) asserts that the infections in the rabbits are probably due to the stress involved in handling including, fur clipping and the use of restraining jackets and applying the test material. The infections are apparently not due to lindane since it is implied that the control group is also affected although it is stated that the toxicity of lindane for the high dose group only (dose level not stated) may be a factor.

The testing laboratory has proposed that since it may not be possible to conduct a 90-day dermal toxicity study that a second study be initiated which will include a decision point at 21 days. After 21 days the rabbits will be assessed for their general health and it will be determined if continued dosing to 90 days will be advisable.

If the condition of the rabbits is such that continued dosing is not advisable, the study will be terminated after 21 days and submitted to the Agency in an attempt to meet the requirement for subchronic dermal toxicity testing in this species. The CIEL is specifically requesting that the Agency approve of this proposed plan.

Toxicology Branch Response.

TB has made a cursory inspection of studies submitted to the Agency in support of various registrations and notes that 90-day dermal toxicity studies with rabbits have been successfully completed by other laboratories.

Thus, TB requests that the testing laboratory resolve the problems associated with conducting a 90-day rabbit dermal toxicity study and complete the 90-day study as requested.

If necessary, arrangements with some other laboratory with more experience in conducting subchronic dermal toxicity studies with rabbits may be advisable. Alternatively, it may be advisable to change the source of rabbits. The infections which the rabbits develop at the Hazleton Laboratory may be the result of an inherent infection in the laboratory or from the supplier or from inexperience in handling the rabbits.