



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

MAY 21 1981

MEMORANDUM

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

SUBJECT: EPA Reg. No. 279-3014: Analysis of Bone Marrow Samples from the
FMC "Mouse II" Study with Permethrin.

TOX Chem. No. 652BB

FROM: John Doherty *J. Doherty* 4130/e1
Toxicology Branch/HED (TS-769)

TO: F.D. R. Gee, PM #17
Registration Division (TS-767)

THRU: Edwin R. Budd, Section Head
Section II, Toxicology Branch/HED (TS-769)

Budd
5/18/81
for WLB

In connection with the audit of the FMC "Mouse II" study, the FMC Corporation has submitted the following two reports entitled:

1. Report on Bone Marrow Evaluation for Bio/Dynamics Project 76-1695 on FMC 33297 in Mice by John C. Bloom, V.M.D., Ph.D.
2. Report on the Re-evaluation of the Effect of FMC 33297 on the Hematopoietic System in Mice for Bio/Dynamics Project 76-1695 by John C. Bloom, V.M.D., Ph.D.

Toxicology Branch review of these reports has noted that the results are of limited value in appraising the effects of permethrin in the diet on bone marrow and peripheral blood components. The consulting veterinarian (Dr. Bloom) made reference to the poor quality of both the smears and staining and indicated that detection of subtle morphologic abnormalities was difficult if not impossible. Reference was also made to the deficiency of there being no total leukocyte count and estimation of hematocrit resulting in a limitation in assessing the hematological status.

In addition, only about 1/3 of the test animals were examined (189 bone marrow smears and 188 peripheral blood smears were prepared out of a total of 600 test animals) to further detract from the usefulness of these data.

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