



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

APR 3 0 1986

OFFICE OF PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Terrestrial Field Study Committee

Review of the Terbufos Protocol

FROM: Field Study Committee

Ecological Effects Branch

Norm Cook, Head-Section 2 Numb (w) THRU:

Ecological Effects Branch

TO: John Bascietto, Biologist

Ecological Effects Branch

The Field Study Committee has reviewed the proposed field study on Terbufos and concurs in general with your draft review. As you point out, the potential to kill birds and other nontarget species has been demonstrated in earlier studies and therefore additional studies limited to addressing if mortality is occurring would not add to our knowledge significantly. Additional studies need to quantify these impacts, i.e., amount of acute mortality caused by the chemical and related effects.

The committee suggests that you expand your review to provide the registrant with guidance on the question which additional studies should address. The Committee believes the following objectives would be appropriate:

- Determine the amount of acute mortality caused by terbufos to non-target species in and around areas of use.
- Determine if reproduction or growth of young are reduced in non-target species due to the use of terbufos and to what extent.
- Determine if survival is influenced in non-targets 3. by the use of terbufos and to what extent.

The Committee believes an appropriate approach to this problem would be a multiple site study for a minimum of two years. The first year would provide baseline data on species that frequent the crop areas treated with terbufos. In the second season an intense monitoring program designed to quantify the above parameters should be initiated using appropriate methods for the species present, such as carcass searches, radio telemetry, multiple mark-recapture, nest monitoring, nest boxes, etc.

Also, attached is an outline of suggested components of a field study protocol submitted to EEB for review which you may want to provide the registrant.

Ed Fite, Chairman Wildlife Biologist

Ken Clark Agronomist

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cc: Michael Slimak