



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

Jack Arthur

OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

October 22, 1997

MEMORANDUM

SUBJECT: Review of Acceptability of Mixer/Loader/Applicator Study Submitted to Support the Reregistration of Carbofuran (MRID No. 428486-01) ; Dated March 2, 1993. (Case No. 0101; Chem. No. 090601) DP Barcode D193597.

FROM: Jack Arthur, Environmental Health Scientist
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TO: Paul Lewis, Chemical Review Manager
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THRU: Susan Hummel, Branch Senior Scientist
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Susan Hummel

I. EXECUTIVE SUMMARY

- A. The studies submitted to fulfill the requirements of Subdivision U Guidelines §231 (dermal exposure at outdoor sites) and §232 (inhalation exposure at outdoor sites) are unacceptable.
- B. The Agency has conducted a surrogate analysis for mixer/loader/applicator exposure and this analysis appears in the HED Chapter of the Carbofuran RED.

II. INTRODUCTION:

SRRD forwarded the above referenced mixer/loader/applicator exposure study to review for Subdivision U Guideline acceptability, as required to support the reregistration of Carbofuran (this is assumed, although no review instructions appear on the bean sheet). Carbofuran is an insecticide and nematicide registered for a variety of food and non-food crops. Preparation of this submission was presumably in response to a 1991 listing of data call-in requirements for mixer/loader/applicator monitoring guideline studies, §231 (dermal exposure at outdoor sites) and §232 (inhalation exposure at outdoor sites)¹.

III. DETAILED CONSIDERATIONS:

This study relies on surrogate data from PHED Version 1.01 (May 13, 1992) to estimate mixer/loader/applicator exposure from the application of Furadan 4F by ground boom and aerial equipment. No guideline study was performed, nor were there any new raw field data generated.

IV. CONCLUSIONS:

The submission made by the registrant is rejected for the purposes of fulfilling the data call-in requirements for Subdivision U Guideline studies §231 and §232. The study is rejected on a general basis that it does not fulfill the requirements envisioned by the data call-in for Subdivision U Guideline studies. Rather it is a surrogate analysis based on the outdated PHED V1.01. The submission has not been put through a detailed evaluation for its merit as a surrogate analyses (although, on this basis it would be rejected because of its use of an outdated version of PHED). The Agency has performed a surrogate analysis for mixers/loaders/applicators for the HED Chapter of the Carbofuran RED. The registrant has an opportunity to respond to the Agency's analysis in the reregistration process.

V. REFERENCES

1. EPA Memorandum from Jeff Evans (HED) to Esther Saito (HED): Postapplication/Reentry and Mixer/Loader/Applicator Exposure Monitoring Data Requirements for List A Chemicals for which Data Call-ins are to be Issued. Memo dated, June 7, 1991.

cc: RDI:SVH:10/22/97
HED/CEB2/JA:811E:CM#2:305-4075
Jack Arthur,
Chemical File