

US EPA ARCHIVE DOCUMENT

*Jack Arthur*



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

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  
*J. Arthur*  
Chemistry and Exposure Branch 2  
Health Effects Division (7509C)

**TO:** Paul Lewis, Chemical Review Manager  
Risk Characterization and Review Branch

**THRU:** Susan Hummel, Branch Senior Scientist  
Chemistry and Exposure Branch 2  
Health Effects Division (7509C)

*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)<sup>1</sup>.

## 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 Rather it is a surrogate analysis based on the outdated PHED V1.01.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