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

29 APR 1988

SPECIAL

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

SUBJECT: Aldicarb Special Review: Evaluation of the Aldicarb National Food Survey. Adequacy of Protocol and Statistical Procedures.

FROM: C. L. Trichilo, PhD., Chief
Residue Chemistry Branch
Hazard Evaluation Division
Office of Pesticide Programs (TS-769) *[Signature]*

TO: N. Philip Ross, PhD, Chief
Statistical Policy Branch
Office of Policy, Planning, and Evaluation (PM-223)

The Residue Chemistry Branch of the Office of Pesticide Programs requests the comments and assistance of the Statistical Policy Branch, OPPE, in evaluating the results of the recent Aldicarb National Food Survey.

The National Food Survey was conducted during 1987 by Rhone-Poulenc in response to the aldicarb Special Review. Its purpose was to determine the residue levels of aldicarb on the major commodities potatoes, citrus, and bananas at the point of purchase. Pesticide residue levels are needed to calculate potential dietary ingestion and consequent dietary risk.

RCB commonly has used residue levels from field trials for this purpose. The use of such values, derived from maximum rates and minimum pre-harvest intervals, potentially can result in over estimation of risk. A question that is posed by the National Food survey is whether the results of the survey are more appropriate for this task.

RCB would like an opinion, from a statistical perspective, as to whether the results of the Aldicarb National Food survey provide a basis for assessing the risk presented by the acutely toxic pesticide aldicarb. Specifically, we have two major questions.

1. Can the 75 samples of each commodity, obtained 3 times during a year, be considered representative of all of the commodity available for consumption?
2. Is it valid to use composited samples to determine residues of an acutely toxic material? For example, residue analyses for

bananas and potatoes were done with composited 5 lb samples. Yet an individual eats a serving portion, generally a single banana or baked potato. Can the survey data be used to estimate levels of ingested residues?

A brief description of the protocol and the results of the survey, and RCB's initial comments are contained in the attached review. The complete data package, about 3000 pages, is available from RCB, if needed.

Since this chemical is in Special Review, I would appreciate your comments as expeditiously as possible. The contact on my staff for this request is Joel Garbus (557-1439). I would appreciate any assistance you can give me in this matter.

Attachment: RCB review of Aldicarb National Food Survey

cc: A. Barton, A.Rispin, Aldicarb S.F., R.F., Circ., Garbus, PMSD/ISB

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