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

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OFFICE OF
PESTICIDES AND TOXIC SUBSTANCES

MEMORANDUM

Subject: PCNB. Peanut Field Trial and Processing Study
Comments. Branch #7509 D159883

From: Jane S. Smith, Chemist *JSS*
Chemistry Branch II - RS
Health Effects Division (H-7509C)

Thru: Andrew R. Rathman, Section Head *ARR*
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To: L. Rossi / S. Cerrelli PM Team 71
Reregistration Branch
Special Review and Reregistration Division (H-7508C)

Jellinek, Schwartz, Connolly and Freshman, Inc., on behalf of AMVAC Chemical Corp., have requested we comment on the PCNB peanut trials conducted in 1988 to fulfill one of the data gaps identified in the 1987 PCNB Registration Standard.

Briefly, peanut field trials were conducted in 1988. The whole peanut rather than the kernel and hull were analyzed for residues. It was decided that the kernel and hull data may be obtained from the frozen samples in reserve from the field trials. It was discovered that a freezer failure had occurred and there were no longer any samples frozen in reserve from those original 1988 peanut field trials. It was decided that a limited number of additional trials would be conducted to obtain the kernel and hull peanut data lacking from the original trials. For each analyte, the laboratory plans on calculating the residue data as a ratio of residues in whole peanuts to residues in hulls and kernels as a function of formulation, area, moisture, and mode of application. The ratios would be applied to the 1988 field trial data for whole peanuts to extrapolate what the residue levels in hulls and kernels would have been.

The 1988 peanut field trials were to be submitted to the Agency this winter. According to their letter, the trials were conducted in TX, NC, GA, and OK. Three formulations (75WP, 10G, 2EC) were administered by band treatment and through overhead sprinklers at the time of pegging. One aerial application was made. Samples were randomly selected 45 days after treatment. Samples were brushed free of soil and frozen.

The additional trials are to be conducted in OK, TX and GA basically the same as the 1988 trials. These trials will begin in the spring of 1991.

CBRS COMMENTS

Conducting new trials in lieu of having the frozen reserve samples from the 1988 trials available for analysis of peanut hull and kernel is reasonable. Considering the trials are being conducted similarly to the original trials is also reasonable. Since the original trials have not been submitted/reviewed by the Agency and this is not a protocol submission, no comments specific to the precise way the trials are being conducted is appropriate. However, the residue data obtained from the additional trials to determine the residues in the peanut hulls and kernels should be submitted independently and should not be used to extrapolate the values for peanut hull and nutmeat from the 1988 trials. We recommend you submit the peanut hull and nutmeat data as an independent study with explanations of the circumstances which brought this study about.

According to the Registration Standard Update Addendum 1 draft, the nature of the residue in plants is not adequately understood. Data depicting the uptake, distribution, and metabolism of ring-labeled ¹⁴C-PCNB in peanuts, potatoes, and cabbage are required. Considering the nature of the residue has not been characterized and the potential additional metabolites of concern have yet to be determined, how can an adequate analyses of the residues from the field trials be conducted when it is not yet known what metabolites should be included in that analyses? Generally, acceptance of the data from the field trials, if adequate, are contingent upon completion of the plant metabolism studies.

cc: circ., Subject File, PCNB Reg Std File, J. Smith, PMSD/ISB.
RDI: A.R.Rathman, 05/29/91; E.Zager, 05/29/91.
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