

7/29/82

Consolidated Review

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

JUL 29 1982

OFFICE OF
PESTICIDES AND TOXIC SUBSTANCESMEMORANDUM

Subject: Emergency Exemption for Use of
DBCP on Peaches

TO: Donald Stubbs, Head
Emergency Response Section
Registration Division (TS-767)

THRU: Anne L. Barton *a j B*
Acting Deputy Director
Hazard Evaluation Division TS-769

The purpose of this memo is to summarize the HED position on the subject application from Clemson University. In order to save time, the branch reviews were transmitted directly to you and were not delayed pending completion of this memo. The Environmental Fate Branch (EFB) and Toxicology Branch (TB) reviews reflect a meeting we held July 27.

The Residue Chemistry Branch indicated in their July 9, 1982 memo that 5 ppb in peaches is the maximum likely residue. EFB stated that at least 0.1 ppb is a reasonable worst case estimate for ground water contamination levels. TB integrates these numbers in an overall, lifetime cancer risk estimate of 2×10^{-5} , or 1/44,000, based on continued, lifetime exposure.

As indicated in the EFB review, use in areas where the producing aquifer is artesian, or confined, would be less likely to result in ground water contamination. Application in areas where the aquifer is very shallow, unconfined, and overlaid by sandy soil would more likely result in ground water contamination. Dr. George Carter of Clemson is familiar with our concerns in this area and should be consulted.

As a general policy, we are very concerned about allowing the use of pesticides in areas where their propensity to

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contaminate ground water has been demonstrated. Such is the case with the present exemption application. This concern for DBCP has been increased by our recent review of the California epidemiology study in areas where the ground water was contaminated by DBCP (briefly described in the July 28, 1982 TB memo and more thoroughly reviewed elsewhere).

There may well be lower risk alternatives, but research in this area is probably inadequate, particularly beyond the limited set of pesticides already registered for peach use. We assume that if DBCP use in South Carolina is to continue, the use will be registered in accordance with the HED data recommendations voiced last Fall. We particularly call attention to our past suggestion that liming at or near the time of DBCP application could enhance the chemical and biological degradation of DBCP, and that the question should be studied.

Finally, if DBCP will be used over unconfined aquifers and close to community well fields, local public health officials should be notified so that periodic water monitoring could be done.



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cc: John Melone
Severn/Creeger/Regelman - EFB
Trichilo/Worthington - RCB
Burnam/Gardner - TB