



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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OFFICE OF
PREVENTION, PESTICIDES AND
TOXIC SUBSTANCES

OFFICIAL RECORD
HEALTH EFFECTS DIVISION
SCIENTIFIC DATA REVIEWS
EPA SERIES 361

MEMORANDUM

SUBJECT: Exposure SAC Review of Propazine

FROM: Jack Arthur, Chairperson
J. Arthur
Exposure SAC

TO: Brenda Tarplee and William Dykstra
Registration Action Branch 1

The Health Effects Division (HED) Science Advisory Council for Exposure met on September 18, 1997 to review the Section 3 Registration request for the greenhouse use of propazine for preemergence weed control on ornamentals (hibiscus and hollyhocks). A list of attendees is attached.

Much of the SAC's discussion centered on the PHED unit exposure estimates. The application method indicated by the registrant is "drenching." Since information on drenching, *per se*, is not found in PHED, the assessment uses PHED data for low pressure handwand and backpack sprayer applications. These data, while the best surrogate for "drenching," also have only a grade C level of confidence (a level of confidence, that has resulted in denial of certain previous Section 3 requests). In addition to this uncertainty, post-application exposure seems quite likely and the extent of this exposure, while expected to be low (occasional movement/adjustment of treated pots), is nevertheless, unknown.

The lack of greenhouse exposure data has in the past, and will continue to present uncertainty in such assessments until proper studies are conducted. Because the MOEs for propazine (using some worst case assumptions), are relatively high, the Exposure SAC believes that it is inappropriate to make this particular registration action dependent on the provision of these studies. Such studies would have been more crucial if the MOEs were closer to the acceptability cut-off. Because such studies would still be necessary in order to refine the

estimates in the propazine assessment, the SAC recommends that the registrant be asked to provide the studies, but that the registration request not be denied over the current lack of such data. This request sets forth the SACs continuing concern that such data be generated.

The specific SAC suggestions/recommendations are as follows:

1. Include in the text of the document that exposure data for a greenhouse drenching scenario does not exist in PHED. It was recommended that high-pressure handwand data be included in the PHED run to attempt to more closely simulate this scenario. It was suggested that studies be provided by the registrant to fill this data gap.
2. Check the method of collecting dermal hand data (hand wash or gloves) in PHED Study #471 to determine the validity of the Grade C rating.
3. Address the exposure to workers upon re-entry (it was noted that workers would probably be ungloved) and document the lack of data to estimate this exposure. It was suggested that a "generic" transfer coefficient be used as a means to obtain a rough indication of this exposure.
4. It was suggested that the Cancer Risk be calculated using the ADD as opposed to the AADD to obtain an upper-bound estimate of this risk. However, the uncertainties associated with the calculation of the ADD must be considered to make this a meaningful estimate.
5. Obtain more use/usage greenhouse data or more thoroughly describe the uncertainties surrounding these parameters (typical number of acres of these ornamentals, number of planting cycles per year, etc.).
6. Include basis for the selection of 30% dermal absorption and 50% (verify this number) inhalation absorption factors. Also, include model used for Q1*.
7. Reference the Section 18 exemptions granted for use of propazine on sorgham (associated food/water FQPA issues).
8. Explain all uncertainties and data weaknesses associated with this exposure assessment throughout the document.

Attachment

cc: Ray Kent, CEB2
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ATTENDEES

Jack Arthur
Kathryn Boyle
Jim Carleton
Judy Coombs
Jeff Dawson
Paula Deschamp
Bill Dykstra
Jeff Evans
Ray Kent
John Leahy
Charlie Lewis
Brenda Tarplee



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