Monsanto

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SUBJECT PCB Reproductive Risk

REFERENCE

TO : George Roush, Jr., M.D.

Dr. Robert J. Moolenaar has prepared a good critique of the EPA's "Quantitative Risk Assessment of Reproductive Risks Associated with Polychlorinated Biphenyl (PCB) Exposure". He approaches the subject generically as the spokesman for AIHC, but accurately addresses the scientific concerns regarding the EPA's approach to PCB's and reproductive risk. He points out the flaws in trying to apply simple mathematics or statistical formulae to the skimpy scientific evidence for the catch-all term of "reproductive risk" as applied to PCB's.

The crucial points on three (3) issues are well addressed:

1. The EPA fails to distinguish between effects on the conceptus in the absence of maternal toxicity versus those seen at frankly maternally toxic doses. (This is one of J.G. Wilson's key points.)

2. The EPA fails to distinguish between direct effects on the fetus versus those effects on adults which interfere with ability to reproduce.

3. The EPA attempts to apply unvalidated and inappropriate non-threshold models to dose levels for reproductive data.

Dr. Moolenaar subtly tries to get across the fact that EPA doesn't know how to deal with the scientific issues involved in reproductive risks and that the AIHC has been trying to offer assistance for some time but to no avail. This point is covered well without being overbearing. He points out some of the difficulties in analysis of tissue levels of PCB and how this situation causes uncertainty in some of the conclusions.

Some of the examples of problems in various species of wildlife which are pointed out in the original EPA document as supporting the hypothesis of reproductive risks are not adequately controlled or evaluated for other factors. Perhaps this point should be made more strongly. This is the only area which might be more thoroughly pursued.

In general I consider the Moolenaar critique well done and would support what he said. Whether we should go beyond his generic approach is another question worthy of consideration. My personal opinion is that we should not.

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