Aroclor - Toxicology

Copy For
W. K. Johnson
W. Kahn

FROM (NAME & LOCATION): E. P. Wheeler - Medical

DATE: December 9, 1968

SUBJECT: Aroclors - Minutes of Our Discussion with Dr. Calandra

REFERENCE:

TO: W. R. Richard
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cc: K. A. Wells - KWELL
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I believe the following summarizes briefly our discussions Friday:

1) Dr. Calandra is to dose several chickens with the Aroclors to make available sample tissues for analysis by Scott Tucker. The doses to be used will approach the lethal dose levels. Appropriate tissues and organs will be frozen and forwarded to St. Louis for analysis. This is intended to yield some gross indication of retention sites and levels in fowl.*

2. Dr. Calandra is to begin 30-day "range finding" toxicity studies with rats on each of the four Aroclors which have been sent to him. The purpose is to establish levels which will be appropriate for chronic two-year studies. Additionally, analysis of excreta and appropriate organs and tissues will provide some information as to metabolic pathways, retention and/or accumulation and balances (as indicated by chemical analysis using "cold" material).

3) It is anticipated that the long range (two-year studies) could be initiated soon after completion of the 30-day studies -- within the next 60 to 90 days. This is not a commitment, however, to begin the two-year studies at that time.

4) The actual preparation of "hot" material is to be held in abeyance but exploration as to the availability and cost of tagged material is to be continued and firmed up.

5) The advisability of determing the character and possibility of isolating the "major fraction" in each of the Aroclors to be studied is to be explored.

6) It would be helpful for Scott Tucker to obtain appropriate animal organs and tissues to become familiar with the extraction and analytical techniques using actual specimens. (I have already arranged with Fred Younger of Younger Laboratories for appropriate specimens from rats with no known exposure to chlorinated compounds. We will have these by Dec. 12. Secondly, I have asked Fred to provide us some specimens from some rats which he is currently dosing with one of the Aroclors in a lubricating oil. These should be available in about two weeks.)

*Equally important, it will provide Scott an opportunity to look for the G. C. peaks reported in the literature.

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7) Analytical work should be initiated to determine the decomposition products when representative materials (paper) containing Arcolor are burned.

8) There should be follow-up with the fish and wildlife people at Patuxent with a request for duplicate samples of some of the tissues in which they have identified PCBs so that Scott can attempt to confirm their results.

9) There should be further discussions initiated with Risebrough and others around the country whom we have not yet contacted but who we believe to be actively engaged in research projects looking for the PCBs.

10) It was deemed advisable to arrange more formally for the correlation and analysis of all of the publications and bits of information which are available. This would include possibly statistical analysis by someone with appropriate biological and biochemical background as well as statistical analysis capability.

11) It was the consensus that the group should schedule monthly meetings to review progress. The first such meeting was tentatively scheduled for January 15 at Dr. Calandra's Laboratories in Chicago.

EPW

Elmer P. Wheeler

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