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AROCLOR 1260 - NEW STUDIES

Mr. V. W. Withers
B2SA

Pursuant to your request, I have reviewed the status of the program outlined in W. B. Papageorge's memo of February 10 on the above named subject. A series of actions were outlined and I would like to summarize for you the status of each assignment.

To publish the results of the BioTest studies on Aroclor 1260.

It was decided that two separate steps were required to prepare the BioTest studies for publication. The first was to review the text and bring the paper up to date by eliminating references that were no longer pertinent, as well as to cite recent references where they applied. The second was to ask BioTest to review the slides on liver pathology in view of the Kimbrough findings. BioTest had to make new slides on the tissues since the first slides were still in the possession of FDA. The slides were made and when they were reviewed, significantly more pathologic effects were noted in the livers of exposed animals than had been observed originally. The cause for the difference in readings was attributed to two factors: One, different slides were read than had been reported in the original study and, in addition, more slides were reviewed at this time. Two, the pathologists are now more inclined to "read something into what they see." Their reading of the slides today with different eyes than they did in 1970 reflects the current view of the specialty of experimental pathology.

Because of their new interpretation of pathology, Monsanto has asked BioTest to rewrite the section on pathology.

Obtain the services of cancer specialist to review both studies.

When we received the revised interpretations of the BioTest study, we then contacted Dr. John Weisburger, of the American Health Foundation, for his opinion regarding the report of the findings of Kimbrough when viewed together with a summary of the BioTest findings. Elmer Wheeler, George Levinskas and I met

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with Dr. Weisburger at the St. Louis airport on May 7 as he was flying through St. Louis on the way to Los Angeles. We had mailed him the Kimbrough and BioTest reports.

Dr. Weisburger thought that Aroclor 1260 should be viewed as a carcinogen but he thought it certainly was less of a carcinogen than carbontetrachloride. He also thought that it was certainly less of a carcinogen than are the aflatoxins which have been given a tolerance in food. The following week he called me to say that he thought that Monsanto should inform NIOSH, OSHA, and EPA of the new findings of Kimbrough, as well as the report of BioTest. In addition, he thought that we should tell them what we plan to do and by that he meant that we should tell them how we plan to tighten up the leaks of PCB's into the environment and to decrease their contact with man.

Weisburger did not supply us with the report. I wanted to hand carry it to the government agencies. Maybe I am hoping for too much from our consultants. I want a statement from a consultant who will say that he thinks that PCB's can be used and do not need to be controlled simply because of the findings of Kimbrough.

We plan to call another cancer specialist, Dr. Shubick, next Tuesday. He returns to his office that date and I plan to go ask him for his opinion. If we cannot have an opinion from him within three weeks, I believe that we should go on with our plans to visit the National Cancer Institute, NIOSH, OSHA, FDA, and EPA. We, obviously, then would need to discuss it with our customers.

3. Complete the WGK Plant employee exposure study.

We have completed our review of the death certificates from the population on which we have a record of death. These death certificates would indicate that there was no unusual incidence of liver cancers in the Krummrich Plant. We are now going to do a modified life table study of the Krummrich population to make our report consistent with that which would be done by NIOSH.

4. Conduct study of Aroclor 1260 with rats.

Because of the new findings in the BioTest study, we have not planned to start a new study in rats. If we plan to continue the PCB business when we go to the government

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agencies then I believe we will have to start further rat studies at that time.

Conduct study of Aroclor 1260 with second species.

The decision to start a study in a second species should be made when we decide what message we plan to take to the government agencies.

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