Monsanto

FROM (NAME & LOCATION) R. E. Keller - Technology Department - S. Second Street

DATE March 30, 1971

SUBJECT AROCLOR - MICHIGAN DEPARTMENT OF HEALTH - DR. PRICE

REFERENCE

cc W. B. Papageorge - GO
Dr. M. N. Johnson - GO
W. R. Richard - GO
E. S. Tucker - Res. 2
E. P. Wheeler - GO

TO : File

I talked to Dr. Harold Price at the Michigan Department of Public Health at Lansing, Michigan by phone this morning in response to Dr. Johnson's earlier discussion on 3/8/71. The following points of information were picked up.

Work on the analysis of human tissues by Price, et al, involves FDA (Mills) and Armour and Burke procedures for the separation of pesticides and related materials. Gas chromatography only is used in their work. However, they have sent a number of samples to a fellow laboratory in Florida where gas chromatography/mass work has been done. Human tissues from all over the United States have been analyzed in this manner. Levels usually range around a few ppm but occasionally get as high as 100-200 ppm polychlorinated biphenyls. In some instances, the chromatograms most nearly resemble Aroclor 4465. Dr. Price realizes that this is a chlorinated biphenyl/terphenyl mixture and is reserving judgment on what he is really seeing. We agreed that he undoubtedly is looking at the PCB portion. Aroclor 1254 also has been found in human fat and he gave the following reference for this work involving their samples - Biros, Walker, Medbery, Bulletin of Environmental Contamination and Toxicology, Volume 5, p. 317, 1970.

All human fat examined has had detectable pesticide residues and about one-half of these had detectable PCB's. PCB residue levels appear to correlate with DDT levels, although this hasn't been definitely established. This is a continuing program and four other Environmental Protection Agency laboratories are also analyzing human fat. These laboratories are finding PCB's at the same rate and levels.

Dr. Price has no thoughts on what constitutes meaningful or significant levels of PCB's in human fat tissue. He gave reference to work underway by Street in Utah as the best effort in this direction.

Dr. Price asked straight out if Aroclor products aren't used in NCR paper. I commented that this was a marketing question which would have to be answered by our people in that area.

We concluded by agreeing to send Dr. Price any information available on Aroclor products. He apparently has none. Bill Papageorge is asked by copy of this memo, do we have product bulletins available at this time? If so, would you please handle? I have sent a method package under separate cover to Dr. Price. We agreed to keep in touch.

REK

R. E. Keller

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