Monsanto

FROM (NAME & LOCATION): E. S. Tucker - R&D Laboratories - South Second Street

DATE: July 14, 1970

SUBJECT: PCB CONTENT OF MISSISSIPPI RIVER CARP

REFERENCES:

TO: W. B. Papageorge
General Offices

cc: R. E. Keller - Res. 1
J. T. Garrett - GO
M. Pierle - WGK
H. Horner - WGK
G. C. Bretsch
T. W. Dalton
B. Corlew
B. Engman
M. Beaudine
D. Jackson
C. Buckley
R. McCutchin

Two very large carp, taken from the Mississippi River earlier this year, were ground and homogenized so that the WGK analytical laboratories could determine the mercury level in the fish. Samples of both fish were retained by us for PCB analyses.

Both fish homogenates were extracted with hexane and the hexane extracts were then saponified with alcoholic KOH, extracted with concentrated sulfuric acid and chromatographed on alumina, prior to EC/GC analysis.

A number of EC active peaks were observed, the chromatograms and appropriate standards are shown in Figures I and II.

The EC chromatogram of sample No. 251 closely resembles that of Aroclor 1242, while that of No. 233 is very much altered with respect to the closest standard, Aroclor 1254. The calculated concentrations of PCB's were as follows:

OR Log No.	Estimated PCB Content		Calculated as Aroclor
	Lipid	Wet Weight	
233	23.6 ppm	1.39 ppm	1254
251	43.0 ppm	5.08 ppm	1242

6/6/70

E. S. Tucker

MONS 099092

db
Attachments - 2

This is extent of our analysis to date. Additional fish have been caught and are at So. 2nd. for analysis. Allowable conc. probably will be 5ppm.

M. Pierle

State contact at Anniston to date is on unofficial basis.