E. E. Stewart, WGK

July 18, 1972

P. Heisler
G. Hippe

Briggs/Stewart 7/6/72 "PCB Residues, Determination in Mississippi River Fish"

Mr. Art Leisy

You are aware of the PCB content in fish taken from the Mississippi River about 15 miles south of the WGK plant. The PCB content in the edible portion ranged from 3 to 34 ppm. Three types of Aroclor (1221, 1248 & 1260) were reported by the laboratory. There is some question as to whether 1221 should be included because other compounds could appear as 1221 on the chromatograph, there could be double counting with 1248, and I can find no instances in the Interdepartmental Task Force on PCB's report where reference is made to 1221 in fish. If we were to ignore 1221 the PCB content in the edible portion would range from 2 to 25 ppm and only 3 of the 8 fish would be above 5 ppm.

I have reviewed the Interdepartmental Task Force on PCB's report "Polychlorinated Biphenyls and the Environment" for reported fish data that can be used to compare with our data.

1. Fish taken from 47 of 50 sampling stations in 1969 ranged from < 0.1 to 15 ppm.

2. Of 40 fish analyzed from several rivers in 1970, the top 20 averaged 36 ppm with range of 10 to 213 ppm. Only 1 of the 40 was < 1 ppm.

3. Samples from 317 fish taken from 13 metropolitan areas (not St. Louis) taken from Nov., 1969 to June, 1971 were in the general range of 1 to 10 ppm. Varied from trace quantities to 35 ppm.

4. Catfish from commercial fish farms at 3 ppm.

DSW 253355

The fish we obtained are not unlike fish taken throughout the United States. There are some with lower and some with higher PCB content.

Also, the PCB content of the recent fish taken from the Mississippi River are much lower in PCB content than those taken at Anniston where values in hundreds of ppm were detected.

Plans are to obtain fish from the Mississippi upstream of St. Louis during week of 7/17. Will sample at Clarksville, Missouri.

E. E. Stewart
Technical Services Department

Upstream fish caught 7/26 All carp

		WT	ppm PCB	2 carp sample	average
#1	645g/453.6 =	1.4#	0.117	0.097	0.107
#2	759/453.6 =	1.7#	0.231	0.205	0.218
#3	1025/453.6 =	2.3#	0.367	0.248	0.308
#4	1705/453.6 =	3.8#	0.073	0.064	0.069

/tm