JUN 9 1975

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

June 5, 1975

OFFICE OF ENFORCEMENT

Mr. William B. Papageorge
Monsanto Company
800 N. Lindbergh Blvd.
St. Louis, Missouri 63166

Dear Mr. Papageorge:

This letter is to follow-up our telephone conversation of this afternoon. As we discussed, EPA and the States surrounding Lake Michigan are concerned over recent government sampling data which indicate high concentrations of polychlorinated biphenyl (PCB) compounds in fish taken from Lake Michigan. The PCB concentrations found in Lake Michigan coho salmon, lake trout, and chubs were found to be substantially higher than the Food and Drug Administration's action guideline of five milligrams per kilogram. Furthermore, it appears that these concentrations have not decreased since 1972, notwithstanding Monsanto's voluntary limiting of its sale of PCB's in 1971 to manufacturers of sealed electrical equipment such as transformers and capacitors.

As a result of this restriction of PCB use to closed systems, State and Federal pollution control agencies had believed that levels of PCB's found in fish, particularly in Lake Michigan, would soon begin to decline. The fact that DDT levels have dropped dramatically since the ban on that pesticide suggested that levels of PCB's should also decline. This has not occurred.

	Species	No. of Fish	Average Length (mm)	Total PCB's (ppm)
1972	Bloaters (chubs)	170*	255	5.66 (0.95)
	Lake Trout	9	648	12.86 (4.75)
	Coho Salmon	10	693	10.93 (2.12)
1973	Bloaters (chubs)	160*	250	5.24 (0.37)
	Lake Trout	30	602	18.93 (2.08)
	Coho Salmon	29	620	12.17 (0.77)
1974	Bloaters (chubs)	130*	252	5.57 (0.31)

*Composite samples, 10 fish/sample

Concentrations in whole fish, wet weight with 95% confidence interval in parenthesis.

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These high levels have persisted in spite of programs to locate sources and to eliminate or reduce the discharges. Due to the persistence of these chemicals in the environment and their ability to be biologically concentrated, the only effective means of controlling them is to prevent them from being introduced into the environment.

We note that the problem of PCB's is not limited to Lake Michigan. Significant levels have recently been found in Lake Ontario and Lake Superior. We also understand that PCB's have been found in ocean fish off the coast of California and that extremely high levels were found below an industrial discharge in Hudson Falls, New York. Information from EPA's National Water Quality Laboratory in Duluth indicates that levels of PCB's can be found near most, if not all industrial centers. Thus, while the problem is perhaps most severe in the Great Lakes area, and particularly Lake Michigan, it is clear that the problem also exists in the heavily industrialized coastal areas.

Monsanto is the only major manufacturer of PCB compounds in the United States. In order to assist the EPA and State agencies in locating potential sources of PCB discharges to the environment, we are requesting that you supply us with the following information:

1. Total amount of each Aroclor produced each year during 1972, 1973, 1974, and the first quarter of 1975. PCB Aroclors to be reported include 1016, 1221, 1232, 1243, 1248, 1254, 1260, 1262, and 1268. Also to be included are chlorinated terphenyls Aroclor 5442, 5460, and 4465.

2. Names and addresses of all direct consumers and the amounts of each Aroclor purchased during 1974.

3. Names and addresses of all wholesale and retail outlets for PCB compounds and the amount of PCB compounds distributed through each during 1974.

4. The predominant utilization of each Aroclor.

5. Information on the biodegradability of each Aroclor including rates and degradation products of each Aroclor.

Please send the above information to me at the U.S. Environmental Protection Agency, 401 M Street, S.W., Washington, D.C. 20460, within thirty (30) days of your receipt of this letter. If any

questions arise, I can be reached at 202-755-8731. As we discussed over the phone, you will be sending me some advance information.

I am pleased and impressed by the spirit of cooperation which you and Monsanto have displayed in this potentially serious matter. Although this Agency has legal authority to require this information, I am delighted that we are able to make this inquiry in a friendly and constructive manner.

Sincerely yours,

Robert A. Emmett

Robert A. Emmett
Chief, Legal Branch
Water Enforcement Division

(NOTE: The data in the chart on page 1 of this letter was provided by the U.S. Fish and Wildlife Service, Great Lakes Fishery Laboratory, Ann Arbor, Michigan.)