State Issues a Warning on Toxic Chemicals in Striped Bass and Salmon

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bass or salmon.

Mr. Reid's restraint was endorsed by Dr. Michael H. Ireton, deputy chief medical examiner of New York City. "I think it is important," he said, "that the preliminary findings not frighten anyone, because they must be more fully evaluated to determine what risks there are to humans in the concentrations found."

In Hot Water

The chemical in question is polychlorinated biphenyl, known more commonly among its PCB. It has been in the manufacture of plastics, electrical transformers, pesticides, inks, caulking compounds and hydraulic fluids.

It is similar in molecular structure to DDT and is not readily soluble in water but highly soluble in fats. Like DDT, it is a chlorinated hydrocarbon, with the dangers of which ecologists have become familiar. Concern in the early nineteen-sixties, it will be recalled, centered on the build-up of concentrations of DDT in predatory birds, especially eagles, ospreys and pelicans, and in the United States.

In the United States, where it is manufactured only by the Monsanto Chemical Company, it has been found in any that carry the name, symbols of PCBs in trade for [illegible]

In several cities, Federal researchers studied 121 shorebirds and other rock from the Hudson River at Fort [illegible] Albany, and near two General Electric plants that have dumped PCBs into the water.

The rock bass contained 3800 parts per million of PCB and the minnows 70 parts per million.

Testing Is Continued

The Federal researchers reported their findings to Mr. Reid, who ordered his staff and Interior Secretary to continue sampling the testing. He stipulated that caught north the Tappan Zee Bridge, less than 20 miles from New York City, had an average of 0.17 parts per million of PCB in their flesh. One had 37 parts per million.

The Department of Environmental Conservation grew less [illegible] 40 years striped bass, all of them caught between Poughkeepsie and Peekskill, and reported to have [illegible] which contained on them by sent [illegible]

The Tappan Zee bass of Lake Ontario had levels of between 12 and 20 parts per million of PCBs.

Mr. Reid said he was sure that General Electric's discharges into the river have contributed to the PCB problem and that other industries are involved. Some fish caught north of Hudson Falls also contained PCB.

"I intend to see corrective control measures and get them from those to quickly as possible," he said. "But that's another matter," Mr. Reid said.

G. E., which has a permit to discharge [illegible] into the river, has closed the two plants in question for nonessential work and will reopen after Aug. 18, Robert Reed, of G. E.'s community-relations department at the Fort Edward plant, said. "We don't put PCBs into the river intentionally, but we live in a real world, and it is going to take time to solve the problem."

Mr. Reid has also ordered his staff to start checking quality of drinking water at various points in the state, people who, for example, bakes fish dishes, water directly out of the Hudson River, and on various recreational [illegible] [illegible]

There are no state regulations governing the [illegible] Those set by the Federal Food and Drug Administration [illegible] [illegible] [illegible]

Monsanto

FROM (NAME & LOCATION): W. B. Papageorge B2SK

DATE: February 10, 1975

SUBJECT: AROCLOR 1260 - HEW STUDIES

REFERENCE:

TO: H. S. Bergen - B2SL

PCB

cc: D. R. Bishop - C2SA
G. L. Bratach - B3NA
[redacted]
F. J. Fitzgerald - B3SA
T. L. Gossage - B2SL
G. J. Levinskas - A2SC
C. Paton - B2SC
W. R. Richard - T3A
G. Roush - A2SA
E. Tillman - A2SA
W. W. Withers - B2SA
P. L. Wright - A2SC

The following met on Thursday, February 6 to review the results of a rat feeding study recently completed by Dr. Renate Kimbrough, Center for Disease Control, HEW:

T. L. Gossage
G. J. Levinskas
W. B. Papageorge
C. Paton
W. R. Richard
G. Roush
E. Tillman
W. W. Withers
P. L. Wright

George Levinskas summarized a meeting held at the National Cancer Institute, Washington, D. C. on January 31, at which sections of liver tissue from Dr. Kimbrough's study were reviewed. Discussion relating to interpretation, significance and required action followed. The following conclusions were drawn:

1. Cancerous liver cells were observed in approximately 8% of the rats exposed to Aroclor 1260 in Dr. Kimbrough's study.

2. This effect was not observed in similar studies conducted for Monsanto Company by Industrial Bio-Test Laboratories.

3. This difference in observed effects could be due to the difference in rat strains used in the two studies.

4. Dr. Kimbrough will in all probability present and/or publish her findings as soon as she can.

5. NIOSH has Dr. Kimbrough's data and certainly, following publication of this information and in the absence of any contradicting reports, the regulatory agencies will be pressured into reviewing their policies and regulations relating to polychlorinated biphenyls. As in the past there will very likely be limited attempts made to distinguish between types of commercial mixtures of polychlorinated biphenyls. The cancer cell formation observed in Dr. Kimbrough's study with Aroclor 1260 under conditions unique to that test will in all probability be quickly and without scienfific basis assumed to occur with all polychlorinated biphenyls.

The following action plan was developed and is recommended for adoption:

	Action	Responsibility	Dates Start	Dates Complete	Estimated Cost
1.	Publish the results of the Monsanto studies conducted by Industrial Bio-Test Laboratories.	G. Roush J.F. Stapleton	Immediately	July 1, 1975	-
2.	Obtain services of cancer specialist to review both studies and interpret significance to current PCB applications.	G. Roush	Immediately	April 1, 1975	$2000 - $5000
3.	Obtain National Cancer Institute interpretation.	G. Roush	Following 2 above.		-
✓ 4.	Discuss with NIOSH, OSHA, FDA, EPA.	G. Roush K.W. Easley W.B. Papageorge	Immediately following 2 and 3 above.		-
5.	Discuss with key customers	G. Roush T.L. Gossage W.B. Papageorge	Coincident with 4 above.		-
6.	Complete WGK plant employee exposure study.	G. Roush	Immediately	April 1, 1975	
7.	Conduct study of Aroclor 1260 with rats to determine effect at 24 months when exposure is withdrawn at 18 months.	G. Roush	Immediately	March, 1977	$ 70,000
8.	Conduct study of Aroclor 1260 with second species (hamster?) to establish if species differences exist.	G. Roush	Immediately		$ 70,000

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Action	Responsibility	Dates Start	Dates Complete	Estimated Cost
9. Conduct 2-year rat feeding study with Aroclor 1016.	G. Roush			$ 85,000
10. Review rat liver sections from Monsanto A-1242 study.	G. Roush	Immediately		$2000 - $5000

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A possibility does exist that Dr. Kimbrough may be interested in conducting some of the animal feeding studies listed in the action plan. Medical Department representatives will explore this possibility.

W. B. Papageorge /pw

W. B. Papageorge

/pw