Monsanto

APR 2 1971

FROM (NAME & LOCATION): B.O. Severson - Japan

DATE: April 26, 1971

SUBJECT:

REFERENCE:

cc: D. Danna - St. Louis
J. L. Corder
V. R. Haupt
J. R. Savage - St. Louis

TO: E. G. Wright
Anniston

I have attached recent newspaper accounts of PCB findings in Japan. You will be particularly interested in the analysis printed in the accounts.

Regards,

Burns Severson

:md

MONS 098392

THE JAPAN TIMES
WED APR 17 1971

# Lake Biwa, Uji River Fish Contaminated

KYOTO—Highly toxic polychlorinated biphenyl (PCB) has been found contained in fish in Lake Biwa and the Uji River from which city water is being taken for Kansai cities, it was learned Tuesday.

The chemical is used in condenser oil, paint and various other items because of its good insulating quality and noncombustibility. It escapes into the atmosphere either in industrial waste water or smoke.

Once released, it does not dissolve but finally enters and accumulates in the human body when water, crops, meat or fish are consumed, according to scientists, who add that the toxicity of PCB is equal to, or even higher, than DDT.

In a recent case in Japan, PCB contained in rice bran oil poisoned many who ate it, causing skin troubles and limb paralysis in some instances.

The discovery of the toxic chemical in fish was made by the Municipal Public Health Research Institute of Kyoto.

Scientists at the institute began studying fish in the Uji River last autumn after receiving reports that 15 cormorants kept along the river for cormorant fishing had died one after another for no apparent reason.

Examination of carp caught in the river showed a content of more than 10 ppm. of PCB. A more intensive examination of fish in the river and in Lake Biwa showed that up to 20 ppm. of PCB was found in 36 fish caught in the southern section of the lake and in the river.

Usually, PCB is considered insoluble in water, but the institute scientists suspect it may have dissolved in the lake and river water since many factories that use PCB stand by the lake and the river.

The scientists are now examining the lake and river water to see if it harbors the toxic chemical.

Water from the two sources serves about 10 million people in the region.

Kunitatsu Fujiwara, chief scientist at the institute, said since American scientists had reported finding PCB in water and oysters, in the U.S., it was possible that the water of Lake Biwa and the Uji River contained it, too.

He said his men were now examining water taken from the lake and the river in consultation with other scientists.

## Cops Raid Home Of Militant Student

URAWA (Kyodo) — Saitama Prefectural Police Tuesday morning searched the apartment of a member of the militant youth group Keihin Ampo Kyoto in Otone, Saitama Prefecture.

Various items were confiscated from the apartment of Takayuki Oka but none of the nine shotguns nor any ammunition stolen when the group robbed a gunshop in mid February was found.

A 10th gun stolen has been recovered but the other nine are still believed in the hands of radical youths.

Tuesday's raid was made to obtain evidence that would substantiate charges made against Meizo Mekita, 24, a leader of the group arrested earlier on suspicion of hiding a wanted man.

## Japan Governors' Team to Visit U.S.

A 10-member delegation from Japan will visit Missouri for the 10th Japan-U.S. governors' conference next October, it was announced Tuesday.

The National Governors' Association here said it had been informed by its American counterpart of plans for the 12-day conference.

The Japanese delegates will arrive in Seattle, a city twinned with Japan's Kobe, next Oct. 20, and they are expected to tour Utah, Missouri, West Virginia, and Maryland.

Delegates will reach New York on Oct. 31 after visiting Washington, D.C.

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ASAHI EVENING NEWS
April 7

# Fish in Tokyo Bay, Inland Sea Also Found to Have High PCB

High concentrations of polychlorinated biphenyl (PCB), reaching a maximum of nearly 120 ppm (parts per million), have been detected in fish living in Tokyo Bay and the Seto Inland Sea by Ryo Tachikawa, assistant professor at Ehime University.

The maximum value is six times the counts found earlier in fish caught in Lake Biwa in Shiga Prefecture and the Uji River in Kyoto.

PCB pollution has become a matter of grave concern the world over, especially since the substance was found to have caused an extensive rice bran oil poisoning case in Japan. Scientists have learned that all parts of the globe are contaminated by PCB, even the penguins in the Antarctic and the sea birds in the Arctic.

Mr. Tachikawa says that while he was surprised at the high readings shown by the fish caught in Tokyo Bay and the Seto Inland Sea, he expects from now on to find fish with higher concentrations.

The scholar believes that it is a certainty that all the coastal waters of Japan are polluted by PCB.

Mr. Tachikawa and his assistant Tadaaki Wakimoto analyzed the flesh, the liver and the belly fat of six young bass, flatfish and goby caught in Tokyo Bay last month.

The belly fat of the young bass showed a maximum reading of 119.6 ppm, the highest ever recorded in the world.

The researchers found 16.5 ppm of PCB in the liver of the young bass, 4.5 ppm in the liver of the flatfish and 3.8 to 5.6 ppm in an organ of the goby.

As for the fish in the Seto Inland Sea, the two men analyzed samples of 14 fish of eight different kinds which were gathered from last year through March.

The highest count in the samples was 2012 ppm found in the fat of young yellowtail caught off Ehime Prefecture. Still that contrasts with 0.5 ppm in fish caught in a fish farm in the Seto Inland Sea.

The second highest was 17.6 ppm detected in the fat of gray mullet caught off Ehime Prefecture.

While sardines generally have a small amount of chemical matters deposited in their bodies, the two researchers found 3.7 ppm of PCB in an organ of a sardine, also caught off Ehime Prefecture.

The young yellowtail and sardine which were examined were picked up at the time a large number of dead fish floated to the surface in January and March this year.

Mr. Tachikawa says that PCB contamination may have had something to do with the death of the fish.

The detection of a maximum of 0.27 ppm of PCB in the flesh of mackerel caught in the ocean off the Goto Islands in Nagasaki Prefecture, Kyushu, showed that not only the coastal waters but also the outer seas are polluted.

Mr. Tachikawa and his assistant also analyzed samples of mud on the sea bottom and the sea water.

Mud samples from Yokohama and Kawasaki harbors showed 2 ppm, and a sample from Tokyo Bay recorded a reading of at least 0.2 ppm.

A concentration of 1 ppm was found in mud from the Seto Inland Sea off Kagawa and Ehime prefectures on Shikoku and in Hiroshima Bay.

Mr. Tachikawa believes that the PCB pollution of Tokyo Bay and the Seto Inland Sea is due in large to factory waste, and the dissolution of paint on ships is also a contributing factor.

Victims in the rice bran oil case are believed to have taken in 0.5 to 2 grams of PCB. The danger of polluted fish is clear, Mr. Tachikawa says, because eating about four kilograms of fish with a concentration of 120 ppm will result in an accumulation of 0.5 gram of PCB in the body.

PCB is extensively used in electrical products and is also contained in printing ink and paint. The substance is chemically very stable, and does not break up easily under high heat or chemical treatment.

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