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# Major New Pollution Danger Is Cited

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WASHINGTON — U.S. Environmental Protection Agency investigators say government safety levels will be set eventually for foods contaminated by polychlorinated biphenyls, PCBs, which stand for polychlorinated biphenyls. Organisms to become a major pollutant.

Dr. Henry Fishback, director of the division of pesticides of the Food and Drug Administration, and other scientists have been warning all year that the chemical is turning up in the country's air and water in a constantly increasing volume.

They say that it may be more of a hazard to humans and wildlife than the controversial pesticide DDT.

"PCB OVER the long haul may be the greatest problem we have," says Dr. Joseph P. Lortie, associate director of the Bureau of Sports Fisheries and Wildlife. "It may be the greatest problem of the chemical age."

Fishback agrees the time is coming soon when states may be forced into establishing PCB safety levels for foods. If they don't, it is likely the federal government will step in, he says.

But first, government officials have to find out how much PCB is entering the environment and how it gets there.

The same puzzle confronts the U.S. Chemical Co. of St. Louis, the only U.S. manufacturer of Aroclor, a chemical also produced in Europe and Japan.

DESPITE COMPANY denials, Fishback says the chemical is being widely used in industry as an additive in plastic products, printing inks, paints, lubricants and sealants. It also is used as a fluid insulator against electricity in power transformers.

According to Fishback, Monsanto on far has declined to reveal how much PCB it produces and markets under the trade name of Aroclor.

A Commerce Department official explained that Monsanto, as sole maker of the chemical in this country, doesn't have to file production reports with the department.

According to unofficial estimates, Monsanto's production is in a capacity of hundreds of millions of pounds annually.

Dr. Harold Price, an analytical chemist in charge of the Michigan State pesticide laboratory, says PCB appears to be almost as prevalent in the environment as DDT, on which controls have been applied.

PCB is a petroleum derivative of benzene, and its molecular structure is almost identical to that of DDT. Also like DDT, it has long-lasting resistance to breakdown and is relatively insoluble in water.

PCB has been found to be toxic to fish and other marine life and to birds and animals. Its possible long-range effect upon man has not been determined.

And no one knows for sure how PCB is being picked up in the human food chain.

Fishback believes that considerable PCB gets into the air

and water as products in which it has been added decompose and oxidize after they have been discarded.

Through improved laboratory methods, scientists now are better able to distinguish between PCB and DDT than in the past. It has been suspected that safe levels of DDT set for food were inaccurate because researchers had been mistaking one of the chemicals for the other.

"What we need now," says Fishback, "are some benchmarks on the action and distribution of PCB so that adequate safety levels can be established if needed."

Also in need of more scientific data on PCB is Calvin Mason, biochemist and toxicologist in the Bureau of Sports Fisheries and Wildlife.

"No one really knows whether the amounts of PCB that are being found are significant," he says. "We may have a lot of it out there that has little, if any, dangerous effect. On the other hand, there may be a small amount of it with a great deal of effect."

Mason says use of PCB should be curtailed if it is found to be hazardous to man. And, in that event, he feels safety levels for the chemical in foods should be established as soon as possible.

Mason says that Monsanto is supplying some Aroclor materials for laboratory testing.

The company also is studying the possibility of using a high-temperature indicator to burn up discarded products containing PCB.

In addition, the company is warning industrial users of potential PCB hazards and is trying to sell them other chemicals which accomplish similar results.

One big user of PCB is the electric transformer industry. Since the chemical is a nonconductor of electricity, it makes an ideal transformer coolant.

John Mason, assistant general manager of Monsanto's Organic Division, says that PCB were banned, "it'd become very serious problems in the electrical industry."

He says that if large steam locomotive transformers were cooled by oil instead of PCB they would be impractical because of noise. If they were cooled by air, he says, the transformers would be as big as the buildings they serve.