

PCB contamination spoiling the lake

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PCB
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the PCB contamination of Lake Michigan really a problem?

Yes, when you consider these developments:

• The Wisconsin Department of Health and Social Services recommends no more than one meal of Lake Michigan salmon or trout per week.

• Ned Fogle, Great Lakes fisheries specialist for Michigan, says his state is recommending that women of child bearing age not eat fish from the lake at all.

• The U.S. Food and Drug Administration is expected to reduce the allowable PCB limit in Lake Michigan fish from 5 parts per million (ppm) to 2 ppm. This would wipe out 50 per cent of Wisconsin's commercial fishing industry, according to James Addis, director of fish management for the Department of Natural Resources.

Scientists say the toxic pollutant PCB (polychlorinated biphenyl) has been found in the snows of Antarctica, in the milk of nursing mothers, in the air, soil, river sediments and in living creatures throughout the world.

More than 90 per cent of all Americans have it in their tissues, according to the Environmental Protection Agency (EPA).

Last year the EPA began testing the breast milk of Americans. PCB was found in the milk of 78 of the first 80 women tested.

Although virtually all experts agree that PCBs pose a significant environmental threat, the issue is complicated by the fact that few adverse health effects have been noted in humans.

Research, however, indicates that large doses of the clear, oily PCB fluid cause skin lesions in humans and produce cancer, genetic damage and death in test animals.

When were PCBs first used? What are they found in?

PCBs were first manufactured in 1881. In 1929,

Monte Carlo Chemical Co. of St. Louis began producing PCBs commercially as an insulator in transformers, capacitors and similar equipment. Within a few years, PCBs became the fluid choice of the electrical industry.

PCBs are also used in heating coils, caulking compounds, recycled paper, carbonless copy paper, and in the electric motors of refrigerators, air conditioners, power saws, clothes washers and dryers, and dishwashers.

Tom Eisele, deputy director of the Lake Michigan Federation, Chicago, says his agency is deeply involved with the PCB problem and is seeking tough regulations on PCBs in Lake Michigan.

"We have been warning pregnant women and women of child-bearing ages to

avoid eating Lake Michigan fish," Eisele says. "PCBs can get into the blood stream and affect the unborn, and breast-feeding mothers can give big doses of PCBs to infants."

Eisele points out his agency isn't making any studies of its own, but "we are monitoring what other people are studying."

How do the PCBs get into Lake Michigan?

Eisele mentions incinerators, landfill sites and industrial dumping of wastes.

Incinerators — "They're not hot enough to burn off the PCBs. The ash leaves the incinerators, becomes airborne and is carried into the lake."

The PCB material can be destroyed only by burning at 2,200 to 2,500 degrees Fahrenheit. Most municipal incinerators burn at only 1,500 to 1,800 degrees. Therefore, any PCB laden material being incinerated now is entering the environment intact.

Landfills — "The junking of refrigerators, etc., eventually the machinery breaks down and PCBs find their way into underground water tables. Underground streams then carry the contaminant into the lake."

"The most concentrated source of PCBs in Lake Michigan is in Waukegan, (Ill.) Harbor," Eisele points out. "The Outboard Marine Corp. has been dumping PCBs for 19 years."

Eisele explained that the firm used PCBs in motors and had dumped its wastes into a stream which carried the pollutants into the harbor.

"EPA (Region 5) discovered it in October of 1976," Eisele says. "An order was issued and Outboard Marine has agreed to not discharge any more PCBs."

Eisele said the concentration of PCBs in the harbor was 250,000 ppm.

"One-quarter of the sediments in the harbor were PCBs," he explains.

"The major problem now," Eisele says, "is to clean up Waukegan Harbor. The federation feels action is not moving fast enough on the clean-up."

"The Illinois EPA is considering dredging or vacuuming the bottom of the harbor... at a cost of \$5 million."

"The Lake Michigan Federation," Eisele says, "believes the company should pay for the contamination and pay a fine."

We urge communities on or near Lake Michigan's shores to exercise care in the disposal of wastes. While the problem is most concentrated now at Waukegan, no communities near the lake are perhaps without fault.

Each community has a responsibility to reduce or eliminate PCB pollution.

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