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"Simply stated the fact is that we are in trouble," said Nathanial Reed, Assistant Secretary of the Department of Interior.

"Our food and water supplies are contaminated, our health is threatened, and we face an environmental stress about which we know comparatively little," he added.

This warning was delivered at a national conference on polychlorinated biphenyls (PCBs) convened last month in Chicago by the Environmental Protection Agency.

For three days, several hundred scientists, government officials and concerned citizens surveyed the mounting evidence against the chemicals, PCBs.

Widely used in electrical transformers and found in some other industrial products and processes, these man-made compounds are now widespread in the environment -- detected in everything from human milk to the world's oceans.

Although U.S. sales have been voluntarily restricted by Monsanto, the sole American Manufacturer, since 1972, PCB levels -- unlike the levels of such contaminants as DDT and mercury -- remain high.

Reed, who heads Interior's Fish, Wildlife and Parks Agency, noted that these high concentrations are still prevalent in all major U. S. lake and river systems, including the Ohio, Mississippi, Columbia, and Rio Grande Rivers.

Furthermore, mature fish in the Great Lakes, particularly Lake Michigan, are contaminated with high PCB levels. New York state has closed its Hudson river commercial fishery because of PCBs.

Officials are concerned about PCBs because of the harmful effects they have been shown to have on man.

At the Chicago meeting Dr. James Allen, University of Wisconsin - Madison pathologist, described what happened when small amounts of a PCB compound were fed in a regular diet to rhesus monkeys. Monkeys were fed concentrations as low as 2.5 parts per million, half the tolerance level for human consumption set by the Food and Drug Administration (FDA).

These amounts were found to cause acne in the monkeys within two months, menstrual irregularities within four months, and reproductive failures after six months. Such tests on rhesus monkeys are considered relatively significant for humans.

In view of the evident toxicity and persistence of PCBs in the environment, what can be done about them? Conference delegates representing a variety of special interests urged several courses of action:

*Great Lakes fishing interests called for a ban on PCBs, but were against lowering the present PCB tolerance levels for fish consumption set by the FDA.

*A National Marine Fisheries Service official warned against unduly alarming the public about PCBs, and thereby undermining the fishing industry at large.

*The electronics industry urged that PCBs not be abandoned for use in transformers and capacitors until a safe, fire-resistant substitute is at hand.

*Several chemical companies did present compounds that might be suitable PCB substitutes. Claims for these products, however, were discounted by Monsanto, which is developing its own substitute compound.

Although they hosted the conference, the EPA was criticized for failing to take action in 1972, when their own panel of experts warned of the dangers of PCBs. However, the delegates generally agreed that the agency has always been hampered by inadequate regulatory powers.

EPA director Russell Train emphasized this weakness in his keynote address. The Toxic Substances Control Act, designed to strengthen his agency's authority, was first proposed in 1970 but never passed, he said.

Since that time, "industry has introduced 600 chemical compounds into the commercial market annually. This has been done without any systematic, advance assessment of their potential impact on human health," said Train.

Urging action on the bill, which is once again before congress, and endorsing the underlying purpose of the PCB conference, he added:

"Some of our most effective 'health care' dollars may be the 'disease prevention' dollars we spend to curb and control pollution and other agents we introduce into our environment.

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