a sewer pipe may be eaten by microorganisms which then are consumed by tiny fish. The PCBs accumulate in such organs of the fish as the liver and are passed on to the next consumer—and the next. Some fish have the ability to bio-accumulate PCBs—to absorb them from waterways and store them in fatty tissues—at concentrations 200,000 times greater than the water in which the fish are swimming.

Health scientists are extremely concerned about these findings because of the toxic nature of PCBs. According to Irving Sax in *Dangerous Properties of Industrial Materials*, exposure to PCBs can produce chloracne, lesions of the liver, vomiting, loss of weight, jaundice, internal swelling and abdominal pain.[51] And the EPA has concluded that the long-term effects of exposure to PCBs could be "insidious and devastating."[52]

One of the most disturbing studies was conducted by Dr. James R. Allen, a pathologist at the University of Wisconsin Medical School. He fed 16 female monkeys PCBs in concentrations similar to those found in Hudson River fish. When the monkeys mated, seven miscarried, two could not conceive at all; and uterine growths were recorded in others. The monkeys developed facial sores and swollen eyelids, and they lost their hair. Their offspring all were undersized, and the infants' bodies had detectable levels of PCBs. When the infant monkeys were breast fed, they all developed the same symptoms as their mothers. Within four months, half of the offspring had died. And two years later—even when the monkeys no longer were being breast fed—they exhibited learning and behavioral difficulties.[53]

The importance of Allen's findings are underlined by EPA studies revealing that virtually all samples of human mothers' milk tested since 1976 contain detectable levels of PCBs. The average level found in the mothers' milk—1.8 parts per million (ppm)—is seven times greater than the amount permitted by the Food and Drug Administration in milk for sale. One nursing mother in Michigan had 10.6 ppm of PCBs in her milk—a dosage level approaching the levels that in Allen's laboratory monkeys caused learning disabilities and hyperactivity.[54]

MONS 003883