D R A F T

ENVIRONMENTAL PRESENCE POLYCHLORINATED BIPHENYLS

Following Monsanto's unilateral action restricting the sale of polychlorinated biphenyls for use in sealed electrical systems, in which they serve as fire resistant insulating fluids, encouraging reports were received which further support our contention that with proper handling and usage the release of PCBs to the environment can be controlled.

A team from the Woods Hole Oceanographic Institution studied North Atlantic surface waters and reported (Harvey et al, Nature, Lond. 1974, 252, 387) that by the end of 1973 the levels of PCBs in these waters were about 40 times lower than those found in 1972. These reductions in surface water concentrations roughly coincided with a tenfold decrease in PCB contamination of the atmosphere over the northwest Atlantic during 1973 (Harvey and Steinhauer, Atmos. Environ. 1974, 8, 777) and a fivefold decrease in the PCB content of mixed plankton from this area between 1972 and 1973 (Harvey et al, J. Mar. Res. 1974, 32, 103).

In a recent report (Blus et al, Bull. Env. Contam. & Toxicol. U. S., 1975, 13, 646) the PCB residues reported in eggs of the brown pelican from Louisiana decreased from a geometric mean of 3.91 mg/g in 1971 to 2.89 mg/g in 1973.

An example of decreasing PCB concentrations in fresh water was submitted during the 1974 hearings relating to Toxic Pollutant Effluent Standards (Sec. 307a P. L. 92-500). Dr. G. Veith, National Water Quality Laboratory, Duluth, Minnesota, referred

in his affidavit to an unpublished report entitled PCBs in the Great Lakes. Studies of the Saginaw River show a reduction in PCB levels following a program of monitoring and control.

The presence of PCBs in food has also diminished. In a review of food surveys by the Food and Drug Administration (Ramsey, Q. Bull. Ass. Fd Drug Off. U. S. 1973, 37, 43), the PCB contamination of both food and packaging materials had shown some reduction in 1973 compared with the findings of 1971 surveys. The trend seemed to be continuing. A 1974 survey reports that the levels of PCBs in paperboard has dropped substantially from results noted in a 1972 FDA survey. Because of the significant decline in PCB incidence, the agency predicted that monitoring may be relaxed at some time in the future. (Food Chemical News, U. S., 1975, 17, 11).

In summary, these reports of the decline of PCBs in marine and fresh water systems and in human food indicate that elimination of PCBs in "open" type applications has removed the major source of PCBs entering the environment. It is our considered opinion that the examples reported are typical of what is happening in other locations.