PCB FACTS

1. What are they?

PCBs (poly-chlorinated biphenyls) are extremely stable, fire-resistent, liquids used mainly as insulating fluids in electrical equipment, notably in high-power transformers and capacitors, which might catch fire were it not for PCBs. Effective and environmentally acceptable substitutes are under development, but as yet unproven.

Monsanto Industrial Chemicals Co. is the sole American producer of PCBs. In 1970, half of Monsanto's PCB sales were to manufacturers of transformers and capacitors. The rest were sold for use as plasticizers in paints, plastics, and sealants, as lubricant additives, hydraulic fluids, heat exchange fluids, and for use in carbonless copy paper and other products. PCBs make the products they are added to last longer. In 1971, Monsanto restricted its sales to manufacturers of transformers and capacitors.

2. Where are PCBs?

According to EPA estimates, the 700 million pounds of PCBs produced in the U.S. since 1929 are distributed as follows:

Presently in service	300 million pounds
In landfills	200 million pounds
In air, water soil and bottom sediments	100 million pounds
Degraded	100 million pounds

3. How are PCBs getting into the environment?

--They leach from landfills

--10,000 pounds per year are discharged into U.S. waters by electric equipment manufacturers and the one Monsanto plant in Sauget, Illinois.

--One to two million pounds are spilled or leaked by electric equipment manufacturers during production, handling and disposal of PCBs and PCB-containing products.

--10 million pounds per year are introduced by sources other than the equipment manufacturers through spills, servicing, handling, recycling and salvaging of PCB-containing equipment and products.

4. Why are PCBs bad?

--Several PCB compounds have been demonstrated to cause reproductive failures, gastric disorders and skin lesions, and to induce tumors in mammals.

--Several species of fish are rendered incapable of reproduction by swimming and feeding in PCB-contaminated water.

--Fish in several bodies of water contain PCB concentrations above the five part per million tolerance level set by the Food and Drug Administration in 1973 for fish sold in interstate commerce. These high PCB levels in fish threaten to destroy commercial and sport fishing in the Great Lakes, the Hudson River, the Upper Mississippi, [redacted] and off the Southern California coast.

--PCBs that leaked from a machine into rice oil that was consumed by Japanese villagers in 1968 appears to have caused a severe outbreak of disease and led to stillbirths.