PCBs Possible Link to Cancer in Humans Is Reported in Study of Mobil Corp. Plant

By a WALL STREET JOURNAL Staff Reporter

WASHINGTON — Mobil Corp. has reported what may be the first association of polychlorinated biphenyls, or PCBs, with cancer in humans.

The exposure occurred at Mobil's Paulsboro, N.J., petrochemical plant, where a PCB product made by Monsanto Co. was being used in the plant's operations. PCBs are widely used as heat-transfer agents in electrical equipment.

Details of the cancer cases were reported in a letter from researchers to the New England Journal of Medicine. The National Institute for Occupational Safety and Health immediately asked scientists in the U.S. and elsewhere for any further reports of the chemical's association with cancer in humans.

PCBs have been linked with a variety of less severe human ailments. Workers exposed to high concentrations have developed skin eruptions, eye discharges, swelling of the eyelids and digestive disturbances. Fed to test animals, the chemical has produced liver cancer in rats and mice.

Studies Are Urged

The Mobil study "is very preliminary," said Rutcose Moore Jr., an epidemiologist at the Occupational Health Institute. "It provides a bit of information, but other studies should be pursued," he said. Mr. Moore said the institute already has begun its own research. It will review the death records of workers in New York State who have been exposed to PCBs to determine whether there is an abnormal incidence of cancer. The study will take about two years to complete.

The Mobil study was conducted by Dr. Anita K. Bahn of the University of Pennsylvania School of Medicine. She reported that malignant melanoma, a frequently fatal form of skin cancer, was developed by two of a group of 31 employes heavily exposed to PCBs. One other worker developed melanoma in a group of 41 employes exposed less intensely.

Melanoma is a fairly unusual form of cancer, and the three cases were an unusual number in a small group of workers. Dr. Bahn noted that based on the expected incidence, only 0.04 malignant melanoma would have been anticipated in the group of 31 employes.

Surveillance Advised

"Because early detection of malignant melanoma may markedly affect survival rates, surveillance for melanoma among those exposed should be considered," Dr. Bahn wrote [redacted] The Mobil study reviewed the health records of two groups of employes who were exposed to PCBs at the Paulsboro plant from 1940 to 1967 and 1953 to 1956. Seven of 92 workers developed cancer. Besides three cases of malignant melanoma, two cases of pancreatic cancer occurred. The incidence of these two types of cancer was significantly greater than would be expected normally in a population of that size, noted Dr. John F. Finklea, institute director. Neither melanoma nor pancreatic cancer previously was associated with occupational exposure to a chemical, experts said.

The PCB product involved was Arocior 1254, manufactured by Monsanto, the largest producer in the U.S.