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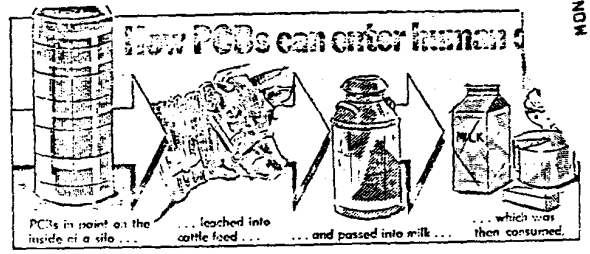
The PCB 'buck' heads for the White House



By HARLAN DRAEGER © Chicago Daily News

CHICAGO — Three years have passed since this country banned its best-known pesticide, DDT. Not all the ripples from that bitter environmental controversy have subsided.

Now, a similar struggle is shaping up over PCBs, a group of toxic chemicals widely used in industry.

The decisive battle may be fought in the Lake Michigan basin, where the potential PCB hazard is getting serious attention. Twice in recent months, technical panels from Lake Michigan states have called for a nationwide ban on all but essential uses of PCBs.

One veteran Washington observer said the emerging issue has stirred interest "at the highest levels" in the Ford administration.

Later this fall, the entire issue will be brushed out at a three-day national conference in Chicago. The symposium, scheduled to begin Nov. 19, is sponsored by the U.S. Environmental Protection Agency (EPA).

PCBs (polychlorinated biphenyls) are not a newly discovered problem. Their presence in the environment has been known for nearly a decade.

What is new is the high priority toxic chemicals suddenly are receiving in the pollution-control field.

PCBs are something like the central character in the old Kaufman and Hart play, "The Man Who Came to Dinner," everyone expected him to leave after a while but he stayed on and on, becoming a first-class nuisance.

In the case of PCBs, voluntary efforts to curtail their use began more than five years ago. Scientists expected a sharp decline in PCB levels in the environment. It didn't happen.

Meanwhile, laboratory evidence of the harmful effects of PCBs has been adding.

PCBs were discovered in fish and shellfish by a Swedish researcher in 1966. Ever since, they have turned up in rivers and lakes, fish, birds, milk, human blood samples and even snowflakes.

Experiments with animals have linked PCBs to harmful reproductive effects, severe skin diseases and liver cancer. Small doses of PCBs were fed to monkeys by Dr. James R. Allen of the University of Wisconsin. The results included stillbirths, small babies, acne and even baldness. Earlier, mink ranchers learned that animals fed with Lake Michigan fish failed to reproduce.

How do PCBs get into the environment? Experts say they can't trace all the sources, which tend to be small. But they are able to identify several major applications in industry.

PCBs are widely used as a flame-retardant, to prevent fires in closed electrical systems. They are found in hydraulic fluids for high-temperature industrial processes such as die-casting machines. Factories and other large buildings use PCBs as a heat transfer fluid in heating-cooling systems.

THE PAPER INDUSTRY is another important source. PCBs have been used in specialty inks, carbonless reproduction paper and certain coloring compounds. The chemical is released to waterways when the paper is recycled. Other applications include plasticizers, fluorescent-light starters, cutting oils, sealants, adhesives and soaps.

High levels of PCBs in Lake Michigan fish first attracted attention in 1969. Researchers suspected that some of the DDT they were reporting actually was PCBs. More accurate testing methods confirmed their suspicions.

Early in 1970, the PCB problem surfaced at a Lake Michigan pollution conference in Milwaukee. Donald Mount, director of the EPA's National Water Quality Laboratory in Duluth, Minn., told the conference:

"We may be facing a problem with PCBs comparable to DDT."

Mount's words were prophetic. Nearly six years later, the issue finally is coming to a head. And it has some interesting wrinkles:

✔ Often, the federal government leans on reluctant states to show more vigor on environmental issues. With PCBs, the opposite is true. In the Midwest, most of the pressure for tighter controls is coming from states such as Michigan and Wisconsin.

✔ Environmental scientists have stepped out of their laboratories to take a leading role in forcing a showdown on PCBs. Technical experts tend to be shy about moving into policy decisions, but the PCB question has generated a new attitude. "We just can't sit on that issue any longer," says Lloyd A. Lueschow, chief of laboratory services for the Wisconsin Department of Natural Resources.

✔ Fans of PCBs are calling for strong medicine — a nationwide ban on all but essential uses. This is a big step beyond conventional pollution control which merely limits discharges.

✔ There is no shortage of adversaries for a lively battle. Industries that use PCBs are sure to resist tough restrictions. They may find allies among farm interests, which fear expanding EPA authority over chemicals.

CONTROLLING PCBs is a natural cause for environmentalists, who focus most easily on single clearly defined targets. Two conservation groups forced the PCB issue along the Hudson River. Well-organized environmental groups in the Lake Michigan Basin are likely to pick up the ball.

The PCB issue could be political dynamite, with a presidential election only 13 months away. Officials in the Ford administration are faced with a delicate balancing act. Democrats are sure to lean on every misstep and pounce every opening.

Few people have done more PCB-tracking than John Hesse, aquatic biologist with the Michigan Department of Natural Resources.

"I view this as a very serious problem, one we've got to take positive action on," he says. "It's not going to go away as easily as DDT."

DDT was banned by states surrounding Lake Michigan in 1970, almost three years before the nationwide ban. The result has been a marked decline in DDT levels in fish taken from the lake. One study showed an 87 per cent drop in DDT in chubs between 1968 and 1974. Last August, EPA released a nationwide survey showing similar fall-offs in DDT levels in human diet and tissues. PCBs are quite another story.

Monsanto, which has made the compounds for 35 years and is the sole U.S. producer, took a major step in 1970. It voluntarily limited sales to 50 large customers, which use PCBs in electrical transformers and capacitors (condensers). Monsanto's production has been cut in half, to 40 million pounds a year.

PRESSURES for action on the PCB problem have built up rapidly since spring.

EPA reactivated a federal-state technical group, the Lake Michigan Toxic Substances Committee. It met for two days in May and came up with a unanimous recommendation.

✔ EPA should impose a nationwide ban on all domestic and imported PCBs destined for use other than in transformers and capacitors.

✔ The critical or essential uses of PCBs in such electric apparatus should be "immediately reviewed" in light of possible substitutes.

"That was the first recommendation for a ban on the sale and manufacture of PCBs in the United States," said Hesse. "The evidence brought us to the conclusion that the only logical approach would be a ban."

In Michigan, the Natural Resources Commission last June 12 supported a total PCB ban. It said that Michigan should ask if EPA agrees to slowly. Later, the Michigan Water Resources Commission adopted a milder resolution, supporting a ban on all uses for which "socially, economically and environmentally acceptable substitutes are available." A bill is pending in the Michigan legislature to ban all PCB uses except in transformers and capacitors.

LAST JULY, U.S. and Canadian experts recommended a crash program to control organic chemicals contaminating the Great Lakes. The two-nation Great Lakes Water Quality Board, noting high PCB levels in Lake Michigan fish, urged an FDA tolerance level 50 times tighter than the present guidelines.

The anti-PCB movement picked up steam in New York State in late summer. Ogden Reid, state commissioner of environmental conservation, issued a complaint against two General Electric Co. plants along the Hudson River.

Reid accused the plants, which make capacitors, of contaminating the river with PCBs. He is asking the courts to require GE to end all discharges by the end of 1976. Later, two conservation groups appealed to EPA to take "immediate and decisive action" to stop the PCB discharges.

In 1969, when the DDT issue came to a boil, governors of five Midwest states set up a technical Pesticide Council. Each state has been sending representatives from agencies dealing with health, agriculture, water and natural resources.

LAST JANUARY, the Firestate council held an all-day study session on the PCB question. On Sept. 18, the council met the issue head-on when Wisconsin's Departments of Natural Resources and Health-Social Service introduced a resolution. It urged state agencies to support a ban on all PCB uses except those deemed essential after public hearings.

"It was a case of technical people suggesting a course of action to resolve an environmental hazard," said Wisconsin's Lloyd Lueschow, chairman of the council.

The resolution carried 7-5, but many members were absent. Lueschow says the status of the vote is in doubt because the committee's mission and procedures are somewhat vague. "I don't know just what I'm going to do with it yet," he said.

Health, pollution-control and resource agencies from Michigan, Minnesota and Wisconsin backed the resolution. Opposing it were two lobbying representatives and agriculture officials from Illinois, Michigan and Wisconsin. Illinois' only delegate at the meeting was Jerrell Heczenczyn, of the state Agriculture Department.

EPA's national conference in Chicago will cover the PCB issue from top to bottom, offering a platform to all interested parties. Early estimates that about 200 people would attend have jumped to 500.

Even if strong action is taken to shut off PCB sources, no one is expecting a quick cure. Says Michigan's John Hesse:

"I feel it will take several years. There is so much of this blasted stuff in circulation."