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Officials Say PCBs Found In Reservoir

By JANE MARTIN

Woods Reservoir near Tullahoma contains unknown amounts of toxic PCB chemicals which have apparently leaked out of the Arnold Engineering Development Center, state water quality officials said here yesterday.

The disclosure that as yet undetermined levels of polychlorinated biphenyls (PCBs) — suspected of causing cancer in humans — exist in the lake comes after preliminary tests by state water quality specialists. This investigation was instigated by *Tennessean* reporters after tips that PCBs, used in electrical equipment and transformers at the facility, had leaked from AEDC and contaminated the water in Woods Reservoir.

"IT'S REALLY too soon to tell just how serious the problem in Woods Reservoir is," said Newt Gibbs, a biologist with the state water quality division.

"We have only done a preliminary and random sampling of sediment in the three creeks flowing through AEDC and into the lake. And while our findings show relatively small amounts of PCBs — which wouldn't be dangerous to humans — we feel they are enough concern to warrant a further, more thorough investigation of sediment as well as fish samples."

Gibbs said state tests, run only on sediment samples, disclosed up to 46 parts per billion of PCBs in the sediment in Brumlow Creek.

"WE HAVEN'T received official notification on paper of the state's findings — just a phone call this 'ernoon," Maj. R. J. Hayes, direc- of public affairs at AEDC, said when they eat fish which has been contaminated.

"BECAUSE PCBs get into the food chain when they leak into the water, taking fish samples at Woods lake will help us evaluate the seriousness of the problem there," said Gibbs, adding that further sediment and fish sampling would start as soon as possible..

As a result of unknown low-level effects of PCBs on human health, in 1977 the Environmental Protection Agency banned its production, sale and use in the United States, effective July 1979. This followed a similar ban in Japan 10 years ago.

But Art Linton, head of the federal facilities branch of the EPA in Atlanta, said that government facilities — like AEDC — which use relatively large amounts of PCBs in their hydraulic and electric systems have until July 1, 1984 to stop using PCBs.

"WE KNOW there are plenty of PCBs in the systems at AEDC, and the Air Force and its civilian contract operator are in the process of finding replacements to those chemicals," said Linton.

The water findings revealed here yesterday are only one more of a growing number of problems AEDC has had with PCBs in recent months. In June, the EPA investigated complaints that workers at the center were eating lunch on drums containing the toxic chemicals.

The agency then ordered physicians at ARO, the civilian contract operator, to begin taking blood samples to determine whether any of the workers were exposed to hazardous levels of PCBs.

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day. "But off-hand we don't consider these results to reveal very significant amounts of PCBs. Our environmentalist tells me that we shouldn't be concerned until levels reach into the parts per million."

"Of course, if the state thinks the situation here merits further investigation, all of us at AEDC will cooperate fully with whatever tests they want to run," said Hayes, who added that sediment samples taken recently by biologists have not yet been evaluated.

Testing for PCB leaks in lakes such as Woods Reservoir is difficult and time consuming because that group of chemicals — like DDT — is not water-soluble. PCB leaks of this kind can settle evenly on the bottom and not be dispersed in solutions. Water organisms and fish then ingest the substances into their tissues. And finally, the toxic chemicals can be absorbed by humans

As of late June, samples taken from approximately 80 workers revealed nothing unusual according to Air Force spokesman Lt. George Jamison.

WHILE BLOOD samples were being taken on workers, federal inspectors from EPA were also checking soil samples for possible leaks. EPA officials later said their findings showed the possibilities of some equipment leaks.

"The answer to the whole PCB situation here is a cleanup that we're going to have to get scheduled with the Air Force," said Lt. Jamison who indicated the Air Force has begun an "intensive effort" to locate all PCBS and make certain they are properly stored."

"Right now we have about 69 55-gallon drums of the chemicals temporarily stored in an empty building," said Jamison.

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