

State laboratories striving to pin down worrisome, elusive PCB threat to water

By Judy Katz

Because of wide fluctuations in early test results, state officials say it is too soon to label either of two natural underground reservoirs — one in Pittsfield and one in Lenox Dale — unfit for drinking water.

But figures newly made public by state officials confirm what readers of The Eagle already know: the results so far are not encouraging.

Tests were performed this year on groundwater that had been hailed in 1974 as a 40-year supply of drinking water for Pittsfield and on three wells offered by the Schweitzer Division of Kimberly-Clark Corp. to the town of Lenox as a stopgap water supply. They revealed levels of polychlorinated biphenyls (PCBs)

well above maximums in federal drinking-water guidelines.

George J. Coogan, head of water supplies for the state Department of Environmental Quality Engineering, said Wednesday that Pittsfield's groundwater area near Brattlebrook Park showed 3.5 parts per million (ppm) of PCBs when tested by the department in March. When retested in June, the water showed less than 1 ppm of the potentially cancer-causing chemical.

Giving the Lenox Dale results from memory, Coogan said the single test conducted there showed about 4 ppm in one well, 2 ppm in a second, and "somewhat less" in a third.

Present federal Environmental Protection Agency guidelines place a 1 part per

billion limit on PCBs in drinking water, which is one-thousandth of one part per million. The Lenox Dale results of 2 ppm and 4 ppm are, respectively, 2,000 and 4,000 times the allowable maximum of PCBs. Floyd Taylor, head of the EPA's water supplies branch for the region, pointed out.

The guidelines, which will stand until new EPA drinking water standards are set some time in the future, are low, Taylor said, because "the average daily exposure to PCBs from food, principally fish, is 8 to 10 micrograms" nationwide. "If you get much above 1 part per billion (from water), that could add 30 to 40 percent to the daily load."

One part per billion is also about the lowest detectible amount using present

instruments, he said.

"We don't know what the long-term effects (of PCBs) on people may turn out to be," he said. "It's more disturbing when we're dealing with an unknown."

Coogan said Angelo Iantosca, the state regional environmental engineer, is ready to retest the Pittsfield water as soon as the city water department pumps up enough water in the test well.

But Iantosca has ordered that no further results be made public until the entire series — which may take a year — is complete.

Assistant environmental engineer Pe-

The PCB threat: How bad is it?
Continued on Page 15

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Continued from Page 1

ter Mokrzecky explained the news black-out:

"The public will be told the results, but we don't want to scare people by giving out premature results which might contain mistakes. To say now, 'Your future water supply is shot' — people will panic."

About one gallon is used for each test sample, he said, "and you don't throw out a water supply because you find PCBs in one gallon of water. Any sampling program should be done over a period of time."

Walter Swartz, another state engineer working directly on the testing program, said individual test results would be "made available," unofficially, to any town under pressure to use a specific water supply.

Lenox had been under pressure to decide whether to use the Schweitzer wells, and Lenox water consultants Whitman & Howard responded last week that the department had "definitely ruled out" use of the Schweitzer wells.

The town is now considering recommendations that a dam and reservoir be constructed either at Pleasant Valley Wildlife Sanctuary or land on the northwest side of West Mountain Road.

"Right now," Swartz said, "any trace of PCBs rules out a water supply."

Mokrzecky said a year would be a reasonable length of time for obtaining a "preliminary indication" of the confirmed condition of a groundwater area. "If we came up with excess amounts

each time we sampled, then we could say with some accuracy that the supply is polluted."

Taylor said that two wells only 100 feet apart may show variations in test results. Just why is hard to explain, and this problem underscores the fact that, as Taylor says, the development and study of groundwater sources "is not a science—it's an art—or an inexact science, at best."

The completed test series, Mokrzecky said, might exonerate the now-suspect groundwater reserves.

"Pittsfield might well be spared," he said. "It depends on the geology. A dense clay layer could spare the aquifer (collection area for underground water) if the PCBs are coming from the dump."

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The Pittsfield Municipal Landfill is close to the groundwater reserve. Both Taylor and Coogan, in discussing the Pittsfield test results, mentioned reports that wastes from "industrial establishments that used PCBs" had been disposed of in the landfill.

General Electric Co. is the only known source of PCBs in the Pittsfield area. Until March of this year, GE used the compound as a base for a fire-safe insulating oil for specialized transformers.

But the chemical, widely used for decades before its dangers began to be recognized, is contained in a variety of common products, many of them likely to end up in landfills when they wear out. "PCBs are everywhere," Coogan said.

Mokrzecky said the Department of Environmental Quality Engineering is "quite sure" that one continuous aquifer runs from Dalton to Lee. PCBs from GE, gradually seeping from 40 years of residues accumulated in the ground, "shouldn't affect the area of the test well," he said, which is downstream of the landfill but upstream of GE. "But it would definitely affect the Schweitzer wells."

If the landfill is identified as a source of PCBs, Taylor said, "It would be difficult to correct. But if one were able to remove that (contaminated) waste, the water supply would gradually become free of contamination."

The self-cleaning process might take several years in groundwater, he said.

Swartz said it would be some time before other groundwater supplies in the Housatonic River basin would be tested for PCBs.

Extensive tests of the basin are under way, in cooperation with the state of Connecticut, where PCBs found in fish in the Housatonic had caused concern. Swartz said the timetable calls for tests on river water, sediment and fish in the first stage, landfill areas in the second stage, and groundwater supplies last.

An exception is being made in the case of the Pittsfield and Lenox Dale wells because those were being actively considered as water supplies.

Asked if it was possible that tests might reveal that all Housatonic basin groundwater contains PCBs, Coogan said only, "That would be a hell of a note."