

[7A] 5-2-2007

# '81 study identified arsenic

Hopkins researcher says city officials, EPA shrugged off warning

BY TOM PELTON  
[SUN REPORTER]

A Johns Hopkins researcher documented high levels of arsenic in a South Baltimore park more than 25 years ago and concluded the element was likely responsible for an unusually high

cancer death rate in the neighborhood.

Dr. Genevieve Matanoski, working under a grant from the U.S. Environmental Protection Agency, published a study in 1981 that linked arsenic dust from the Allied Chemical Co. pesticide plant next to Swann Park to a fatal lung cancer rate more than three times normal for Baltimore's working-class neighborhoods.

She found high levels of arsenic along the rail lines leading to and from the factory and concluded

that the carcinogenic dust was probably blowing off train cars and polluting not only the park but also nearby residential areas.

"Nobody was keeping it secret," Matanoski, former chairman of the EPA's science advisory board, said of the high arsenic levels in Swann Park. "We told the city and the EPA, 'You've got arsenic in the soil in the park, and it's a problem,' and they were like, 'OK, thanks for the information.'"

She faulted federal, state and [Please see ARSENIC, 4A]



Dr. Genevieve Matanoski of the Johns Hopkins School of Public Health visits Swann Park. She and colleagues documented high levels of arsenic there more than 25 years ago.

BARBARA HADDOCK TAYLOR [SUN PHOTOGRAPHER]

## FROM THE COVER

# Results of arsenic study languished, researcher says

**ARSENIC** [From Page 1A]

local governments for failing to follow up on her study with more tests and perhaps removing or burying the arsenic. "The [cancer] deaths had to be followed up on," she said. "Somebody has to take the information and use it."

Baltimore officials recently suggested that nobody outside of Allied and perhaps a state cleanup task force knew about the high levels of arsenic in Swann Park. "I want to understand why we are only learning about this problem now," Mayor Sheila Dixon demanded April 20, as she announced a city investigation into why arsenic levels in the park were kept quiet for years.

Matanoski said her conclusions were published in the journal *Environmental Research*, and she presented them to the EPA and to a conference of the American Public Health Association. Some of her preliminary findings were reported in *The Sun* in 1976.

Swann Park, beside the Middle Branch of the Patapsco River, opened in 1914 and for decades was popular among children's sports leagues, including the football and softball teams of Southern High School, now called Digital Harbor. For almost a century, from the late 1800s until 1976, Allied and other companies immediately north of the park used arsenic, a known cancer-causing agent, and other chemicals to make pesticides. The products included kepone, a highly toxic nerve-damaging compound, and DDT, which was later banned for killing fish and birds.

The city closed the park last month after Allied's successor company, Honeywell International, turned over to the state documents related to the repair of a leaky asphalt cap built over the now-vacant factory site. The documents showed that confidential company tests in 1976 found high levels of arsenic in the park. A new round of testing last month showed that arsenic remains in the park at levels up to 2,200 parts per million, more than 100 times what is considered safe.

A state senator who represents the area and a longtime football coach at nearby Southern High



In 1976, a sign warns that Swann Park in South Baltimore is closed after toxic pesticide ingredients were found in the soil.

[SUN FILES]

School, whose teams practiced in the park, voiced outrage that nobody told them about the arsenic.

Sen. George W. Della Jr. grew up near the Race Street factory in a neighborhood that Matanoski found was a high cancer zone. He represented the district on the Baltimore City Council in 1976 and 1977 when the city closed and then reopened Swann Park, after kepone was found in the ball fields.

## 'Screaming, crying'

He said he was assured by city officials at the time that the park was safe. If he had heard about Matanoski's study, Della said, he would have demanded that the park remain closed until all the toxic chemicals were cleaned up.

"We were never made privy to information like this," Della said of the study. "There would have been such a screaming and crying that Swann Park would never have reopened."

Don Wade, coach and athletic director at Southern High School during the 1970s and 1980s, said he's angry that nobody told him about the arsenic in the park or the high cancer rates found by the study. Wade said he led hundreds of football players and oth-

er athletes in frequent practices on the contaminated soil.

"At no time did I ever know about arsenic being there, no," he said. "I've got thousands of kids who have been subjected to this over the last 35 years, and nobody knows what's going to happen to them."

Terri White, a spokeswoman for the EPA, said yesterday that her agency is performing an archive search to determine what the government did with the Swann Park study. "I can't say what actions we may have taken that far back," White said.

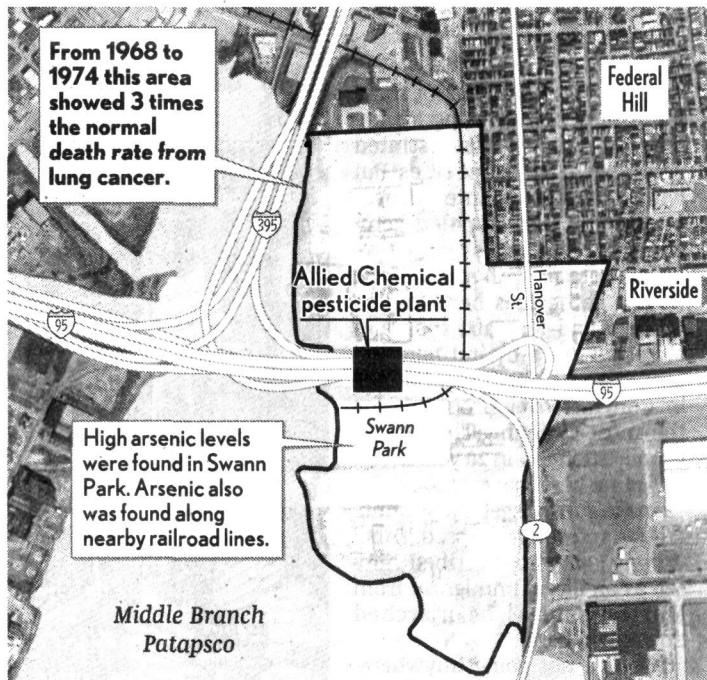
The city's health commissioner, Dr. Joshua M. Sharfstein, said he plans to meet with Matanoski today to discuss her study. After closing the park April 19, Sharfstein called in federal health investigators, who are now studying whether the high levels of arsenic dust in the soil pose any risk to neighborhood residents.

"It's pretty interesting that there was a paper on a very closely related topic to what we are now dealing with," Sharfstein said.

He said it's unclear whether anyone in the city government read Matanoski's study at the time. Sharfstein speculated that perhaps there wasn't much fol-

## STUDY LINKED HIGH CANCER RATES IN SOUTH BALTIMORE TO ARSENIC DUST

A Johns Hopkins study published in 1981 found high levels of arsenic dust in Swann Park and high lung cancer rates in the surrounding South Baltimore neighborhood.



Sources: *Cancer Mortality In an Industrial Area of Baltimore*, Sanborn via Google Earth

CHRISTINE FELLEENZ [SUN CARTOGRAPHER]

low-up to the study because the plant closed in 1976.

"One question is whether people just felt relieved that the plant was shutting down, and there wasn't a lot of attention paid to the soil" in the areas around the plant, Sharfstein said.

Records on file with the Maryland Department of the Environment suggest that city officials wanted discussions of pollution problems at the former Allied plant kept quiet.

A 1997 report from a consultant working for the city acknowledged "sensitive issues" surrounding the site, but it said the city's goals were to "allay public concerns" and encourage "favorable media coverage."

A 2002 letter from the city's law office to the Maryland Department of the Environment thanked the state for its "current and future efforts" to keep documents "confidential" about an in-

terim agreement between the city and Honeywell to contain pollution at the factory site.

Horacio Tablada, who is director of the MDE's Waste Management Administration, said he was not aware of Matanoski's study until he received a copy of it this week from *The Sun*.

He noted that the state environment department didn't even exist when the study was published in 1981. "That was at the infancy of environmental programs in the whole country," Tablada said. "There were a lot of things that agencies were not communicating about at the time."

Tablada said that on April 24, the state ordered the city, which owns the park, and Honeywell, which is responsible for the pollution, to come up with a cleanup plan within 30 days.

Matanoski has been teaching at the Johns Hopkins School of Public Health since 1957 and is chair-

man of an EPA advisory subcommittee on arsenic.

In 1976 and 1977, she and her assistants took more than 100 soil samples from Swann Park and the surrounding neighborhood in South Baltimore and sent them to an EPA-certified lab for testing. She and her fellow researchers found the highest levels of arsenic near the northern edge of the park, near where the factory loaded train cars with arsenic-based pesticides.

They also found unusually high levels of arsenic in the dirt for the half-mile stretch of the rail line that they checked leading north from the plant along Race Street, west of the Federal Hill neighborhood.

"They had big hopper cars, and [the arsenic] poured down through the spouts, and it would spill all the way down," she said. "As they bounced along, it poured out onto the tracks. And if a wind picked up, it would blow out into the neighborhood."

## High cancer rates

She checked the hospital records of 700 people — some lived in the neighborhood, some lived in other white, blue-collar areas of the city. None worked at the plant. In the census tract around the factory, her team found 3.2 times the normal lung cancer death rate among men in the years 1968 to 1974.

Matanoski's conclusion was that arsenic dust from the plant and its train cars was causing fatal lung cancer in the neighborhood. The deaths were only among men; this might have been because only men played on Swann Park's ball fields, she theorized. Another explanation was that men smoked more than women, she said, and smoking made lungs more vulnerable to cancer triggered by arsenic dust.

It's not clear what risks, if any, were faced by children playing in the park after the factory closed, she said. That's because the arsenic in the park's soil today is less likely to become airborne and cause harm than the dust that drifted off the plant's rail cars.

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