

I am Dr. Daniel Lefkowitz, a retired podiatrist and a resident of Yorktown Heights in Westchester, New York. I am head of the Westchester County Task Force on PCBs, creator of the website pcbinschools.org, and the parent who in the fall of 2004 discovered PCB-contaminated caulk and soil at my son's school - The French Hill Elementary School in Yorktown Heights.

My involvement with PCB contamination in schools started in the fall of 2004 when I read a Harvard study by Dr. Bob Herrick entitled "An Unrecognized Source of PCB Contamination in Schools and Other Buildings."

Wondering if my son's elementary school, The French Hill Elementary School in Yorktown Heights had PCB contaminated caulk, I contacted the EPA and based on their suggestion, looked for a piece of caulking on the ground. I found a piece of caulk and tested it. The result was 38,000 ppm of PCBs. Upon receipt of my result the Westchester County Health Department ordered the school to remove all caulking from the school ground.

I then made a request to the County Health Department to go to the French Hill School and test the soil and indoor environment for contamination. They refused my request. I then proceeded to do my own soil sampling. With a soil result yielding 280 ppm of PCBs, and confirmation of soil contamination by the Westchester County Health Department, the Yorktown Central School District was ordered by the state to remove 1130 tons or 591 cubic yards of contaminated soil. The contaminated soil was abated 10 feet away from the entire perimeter of the school building, except for one section that was 40 feet from the school building

The cleanup received media attention.

Let me read the following from the July 4, 2005 New York Times article "**Tainted Soil to Be Removed Next to Westchester School:**

In what state health officials call the first cleanup of its kind in the state, a school district in Westchester County is planning to remove soil next to an elementary school in Yorktown Heights because the soil is contaminated by PCB's from caulking in the school's windows.

A spokesman for the State Department of Health said the cleanup was the first the agency was aware of involving PCB contamination from caulk.

After the soil remediation, the school district performed post-remediation PCB wipe testing of the exterior of the building that resulted in decontamination of the exterior doors and windows. Even though PCBs were found on indoor wipe sampling, the levels were below the EPA standard. No air samples were taken.

I need to point out that many Yorktown parents knew nothing about the exterior window and door contamination, and that the school district did not install one warning sign or fencing to keep the children away from the exterior of the building. In addition, the Yorktown Central School District had violated EPA disposal regulations when they sent all 1130 tons of contaminated soil to a disposal facility in Pennsylvania unauthorized to accept the soil.

Please make sure that the contaminated soil found at the city schools are sent to an authorized disposal facility.

Now that the soil was remediated and the exterior for the building decontaminated, what was the Yorktown School District going to do about the PCB-laden caulk on the building? Since the caulking had such high levels of PCBs, the school district decided to limit the children's exposure to the PCBs by encapsulating some of the caulking with new caulking and paint. There was only one problem with this. What they were doing was illegal under federal law. PCB-contaminated caulk has to be removed, and cannot be encapsulated.

For a very long period of time, the EPA negotiated with the school district about the caulking. The school district took the position that there were no regulations requiring them to remove the caulk, and was unfairly being targeted by the EPA. In 2007, the Yorktown School District asked Senator Schumer to intercede on their behalf.

On July 26, 2007, the EPA responded to Senator Schumer.

Let me read this portion of the EPA letter to Senator Schumer.

“In this case our response (EPA) has been primarily focused on reducing or eliminating the potential health risks to the children and personnel of French Hill as a result of the presence of PCBs. The presence of PCBs in schools is of particular concern because PCBs are considered developmental toxins.

The continued presence or use of caulk, which at French Hill is contaminated with PCBs as high as 60,000 parts per million, is prohibited by the Toxic Substance Control Act (TSCA) and the Agency's PCB regulations at 40 CFR section 761.20(a), except to the extent authorized by EPA rule. The use of PCBs in caulk is not an authorized use and thus is a violation of section 6 (e) of TSCA.”

“When EPA has become aware of PCB-contaminated materials in other school buildings, the subsequent discussions with those schools have resulted in the reduction of PCB-contaminated substances from the building or structure in accordance with the federal PCB regulations, including the removal of PCB-containing caulking and paint from window frames and the reduction of PCBs in contaminated porous masonry material.”

I would like to read a section of the November 3, 2005 letter from EPA Region 2 addressed to the Westchester County Board of Legislators

“The use of PCBs in caulking and sealant materials has never been authorized by the Environmental Protection Agency. In general, the placement of such materials pre-dates the enactment of the Toxic Substance Control Act, and its use today is not authorized. Therefore, the prospect of authorizing the continued use of this material in residential settings, or where children could be exposed is extremely unlikely. Because it is illegal and the potential for exposure maybe significant, PCB-containing caulk must be removed upon discovery.”

What was the end result? Over the 2007 summer vacation - approximately three years since the discovery of contaminated caulking, the Yorktown School District removed the contaminated caulking from the building, including 180 linear feet of contaminated sidewalk caulking. In addition, the EPA stated that they were going to address the issue of PCBs in caulk with a Q and A. We are still awaiting their Q and A.

On October 4, 2007, the Yorktown School Board hired the law firm of Kennedy & Madonna LLP to sue Monsanto and other defendants to recoup costs for PCB remediation.

What happened at Yorktown, was a tip of the iceberg.

After I discovered the contamination in 2004, I knew that there had to be many other schools at risk for PCB contamination. Without mandated testing, we as a nation are failing to protect our children.

In order to bring national attention, and to educate the public and government officials about this issue, I created a website called [pcbinschools.org](http://pcbinschools.org). In addition, I, with Mr. George Weymouth surveyed a number of schools for PCB-laden caulk, including the Bronx schools listed in the New York Daily News.

My website, [pcbinschools.org](http://pcbinschools.org), has photos of schools with contaminated caulking, caulk and soil sampling reports, documentation from the EPA and the NYS Education Department, research studies, media reports, blood study analysis, in addition to information pertaining to the Yorktown PCB lawsuit against Monsanto.

If you look at my website, you will see a list of schools, buildings and structures that contain PCB-contaminated caulk and/or soil.

PS 199, PS 30, PS 181, PS 178, PS 160, PS 153, PS 131 and PS 86, French Hill Elementary in Yorktown, Benjamin Franklin Elementary in Shrub Oak, University of Rhode Island, UMass in Amherst, East Ramapo Central Schools in Rockland, Putnam Valley Middle School, SUNY Oswego, Catholic High School in Massachusetts, Burlington High School in Massachusetts, Mount Sinai Hospital, Denver Water Basin, Co-Op City in the Bronx and so on.

If you look for PCBs in schools, you will find it. Since there are no laws mandating testing for PCBs, the NYC Department of Education, NYS Education Department, local school boards will not look for it. Why should they? Who wants to pay for remediation, and burden taxpayers with higher school taxes? Why risk lawsuits from parents or teachers? Forget about the exposure risks to children, teachers of child-bearing years, and the custodians.

To school boards, administrators, education officials responsible for a safe and healthy school environment, ignorance is bliss!

And what about our political leaders? When asked about introducing legislation to mandate testing in the senate, my state senator summed it up very nicely by saying

“A bill for mandated testing will never pass the state senate. It is another unfunded mandate.”

While there are laws and regulations pertaining to the use and disposal of PCBs, there are no federal, state, county or city laws or regulations requiring schools to test for it. That has to change right now!!

In 2007, the New York State Education Department, released protocols to address concerns about properly managing caulk containing PCBs that will be disturbed during building renovation and maintenance. Even though this is a good first step, it is very important to

remember that the State Education Department protocols are guidelines and recommendations. There is no mandated testing.

Even though caulking is a major source of PCBs, there is nothing in the State Education protocols pertaining to other important sources of PCBs such as ceiling and floor tile, paint, gaskets, foamboard, and materials in ventilation systems

And what about small maintenance jobs by custodians or contractors involving disturbance of caulking. Do you actually think a school district is going to test for PCBs? Absolutely not! A custodian or contractor will perform the repair work whether it is a window, door, expansion joint, floor tile, and that will be it.

To further highlight this, two weeks ago I had to remind my school district, the Yorktown School District about sampling the exterior door caulking and door paint for PCBs prior to an exterior door renovation project. I was watching them. But what about the hundreds of other school districts throughout the state where no one is watching?

Joint caulking or sealants are important diffuse sources of PCBs, representing a potential hazard for human health and the environment. PCBs can volatilize or migrate out of caulking and contaminate the indoor air, soil around buildings, the outdoor environment and adjacent masonry.

Let us look at the French Hill Elementary School where caulk sampling from a column at the front entrance yielded levels of 60,000 ppm on bulk sampling and levels of 22,700 ug/100cm<sup>2</sup> on wipe sampling. 60,000 ppm means that 6% of the caulking is PCBs. The number 22,700 ug/100cm<sup>2</sup> is extraordinary when you consider that the EPA standard is 10ug/cm<sup>2</sup>. The wipe sample clearly demonstrates that PCBs were migrating or leaching out of this caulk; thus exposing children to this toxic material via dermal contact.

As you can see from the photos of the column caulking, children were writing on and coming in contact with toxic material. Even if one were to use a factor of 1% to adjust for the use of Hexane as a solvent in the wipe samples, we are still looking at a wipe sample of 227 ug/100cm<sup>2</sup> - twenty two times the legal cleanup standard.

I ask you this: "Would you allow your own child to rub his or her hands or write with chalk on contaminated caulking? Would you allow your child to pick at contaminated caulking with his or her fingernails? The Yorktown Central School District did.

Here is a photo of children playing right next to contaminated expansion joint caulk at the Ben Franklin Elementary School in Shrub Oak, N.Y.

Can undisturbed caulking raise serum blood levels of PCBs? Yes!

Investigations since the early 1990s have provided evidence that occupancy of buildings containing PCB-rich construction materials can result in elevated serum PCB levels of lower congeners. A number of studies in Europe have demonstrated a relationship between increased serum blood levels of lower chlorinated congeners in students and teachers attending schools containing PCB-laden caulk.

Can intact PCB-containing caulk and other materials increase indoor levels of PCBs?

The answer is yes. Just look at the Chafee Building at University of Rhode Island where PCBs were detected in dust samples that exceeded allowable state limits. PCB levels exceeding the allowable limit of 50 ppm set by the US EPA were found in caulking material (caulking contained PCB concentrations up to 33,000 ppm), foamboard insulation, gasket material around windows and components of the building ventilation system. The indoor contamination was a result of PCBs being released from undisturbed PCB-containing materials.

The EPA mandated abatement involved removal of PCB-containing material, including masonry that was contaminated from the window caulking, and cleaning of the building. Compliance with the abatement plan required removal of porous masonry material because PCBs had permeated up to two inches beyond the surface. The cost for the abatement was \$3.8 million.

If the sources of contamination were removed at Rhode Island, is the New York City Department of Health going to determine the source of contamination in room 179 at PS 153?

Children have different susceptibility to the health effects of PCBs compared with adults. In its toxicologic review, the Agency for Toxic Substances and Disease Registry (ATSDR) (2000) concluded that

Younger children may be particularly vulnerable to PCBs because, compared to adults, they are growing more rapidly and generally have lower and distinct profiles of biotransformation enzymes, as well as much smaller fat deposits for sequestering the lipophile of PCBs.

Since children are different than adults, why do we continue to apply PCB regulatory action levels meant to protect adult males and use those standards for children?

Even though we get PCBs mainly through food, we should not dismiss the potential of the indirect contribution of PCBs in air to total human exposure. According to the World Health Organization, it is important to control known sources as well as to identify new sources

With what we know about PCBs volatilizing and migrating out of intact undisturbed caulking and other construction materials; the exposure risk to children through dermal contact; the raising of PCB serum blood levels though inhalation, the evidence of indoor and outdoor contamination, and the lack of oversight during construction projects, I ask, "Why would we still allow PCBs, a known toxin, to remain in our school buildings?"

We need federal legislation that will mandate testing for PCBs in all schools and provide funding for remediation.

Thank you for allowing me to speak.

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