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# **NEW SOLUTIONS**

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**PCBs in Schools: What about School  
Maintenance Workers?**

*David M. Newman*

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*Comments and Controversy*

**PCBS IN SCHOOLS: WHAT ABOUT SCHOOL  
MAINTENANCE WORKERS?**

**DAVID M. NEWMAN**

**ABSTRACT**

Driven by environmental and parent activists, government agencies are paying increasing attention to the issue of PCBs in in-place caulk, particularly in school buildings. At the same time, there is insufficient consideration of the school maintenance workers and contractors who maintain and replace PCB caulk, even though they may constitute the school population with the highest exposures and risks. This commentary briefly assesses recent PCB-related developments at the U.S. Occupational Safety and Health Administration (OSHA), U.S. Environmental Protection Agency (EPA), and the New York State Education Department from an occupational health perspective.

Many thanks to Bob Herrick for his article on PCBs ("PCBs in School—Persistent Chemicals, Persistent Problems." *New Solutions*, Vol. 20, No. 1). It is largely due to his work and that of other activists like George Weymouth and Dan Lefkowitz that potential environmental and public health risks are now being discussed, if not yet adequately addressed.

Still missing from the equation, though, is sufficient consideration of possible health risks faced by the population with potentially the highest exposures and risks—the school maintenance workers and contractors who maintain and replace PCB caulk and other PCB materials. These disturbance activities can release PCBs into the air where they are available for inhalation and dispersion. Anecdotal accounts indicate that employers of these worker populations do not conduct PCB-focused job hazard assessments and do not provide training on PCB hazards, safe work practices, and use of appropriate personal protective equipment.

The Occupational Health and Safety Administration (OSHA) acknowledges PCBs in caulk as an "emerging issue," but whether or when guidance or intervention may occur is not known [1].

A protocol issued by the New York State Education Department (NYSED) suggests, but does not require, that PCB remediation adhere to the Department of Housing and Urban Development (HUD) lead-based paint guidelines [2, 3]. While HUD guidelines include directions for worker protection, and although utilization of these guidelines for safe work practices with lead-based paint would likely provide significant worker protection against PCB exposure, they do not, by definition, address exposure monitoring for PCBs or risk assessment for PCBs. Additionally, since the NYSED protocol does not specifically mention worker protection, school administrators and contractors working for NYSED are less likely to consider it. The NYSED document also does not address ongoing maintenance work, as distinct from remediation operations.

EPA recently posted multiple guidance documents on its website regarding PCBs in caulk, including detailed worker safety guidelines for remediation contractors [4, 5]. While the guidelines are comprehensive and welcome, emphasizing dust control, skin and eye protection, and training, they fall short in several respects. They do not require air monitoring which is necessary in order to assess worker exposure and to help determine appropriate protective measures such as engineering controls, safe work practices, and personal protective equipment. Rather they recommend "testing to determine if PCB levels in the air exceed EPA's suggested public health levels" *if* school administrators and building owners "are concerned." EPA's suggested public health levels are not delineated. The guidance document includes a photograph of a half-face air purifying respirator but the accompanying text does not mention respiratory protection, does not specify appropriate filters, and does not reference OSHA requirements for hazard assessment (29 CFR 1910.132) or respiratory protection (29 CFR 1910.134).

At the same time that the EPA is providing increased, and welcome, guidance on PCBs in caulk, it appears to be moving toward a less protective stance on the issue. Use or presence of PCB-containing paint, caulk, or tar, *in any concentration*, is not permitted under 40 CFR 761.20 and 761.30 of the Toxic Substances Control Act (TSCA). EPA has been quite clear on this issue as recently as July 2007:

The federal PCB regulations at 40 CFR section 761.30 specifically list the authorized uses of PCBs for "non-totally enclosed" activities; i.e., activities that may expose human beings or the environment to PCBs. Any non-totally enclosed use not specifically authorized under 40 CFR section 761.30 is prohibited. . . . The use of PCBs in caulk is not an authorized use and thus is a violation of section 6 (e) of the TSCA. . . . Continued use of [in-place] PCB-containing caulk is prohibited by TSCA and the PCB regulations [6].

As of October 2009, however, EPA apparently revised its position on PCBs in caulk:

Caulk that contains PCBs at greater than 50 ppm is not authorized for continued use and must be removed. . . . [Y]ou are not required to remove caulk containing PCBs at levels below 50 ppm [7].

Until we have hazard assessments that rely on task-specific occupational exposure data, it will not be possible to know with confidence what the occupational risks are or whether or what kind of protective measures are needed. Perhaps a union or an employer with standing will step up to the plate and request that the U.S. National Institute for Occupational Safety and Health (NIOSH) conduct a Health Hazard Evaluation (HHE) of school workers or contractors engaged in maintenance or remediation activities involving PCB caulk.

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