

CURRENT BEST PRACTICES FOR PCBs IN CAULK FACT SHEET
Disposal Options for PCBs in Caulk and PCB-Contaminated Soil and Building Materials
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PCBs in caulk

EPA has learned that caulk containing polychlorinated biphenyls (PCBs) was used in many buildings, including schools, during building construction, renovation, or repair from the 1950s through the late 1970s.

This fact sheet identifies for school system officials key information on disposal options for PCBs in caulk and contaminated soil and building materials.

In addition, this fact sheet identifies who to contact at EPA for advice on addressing PCBs in caulk.

PCBs were not added to caulk after 1978. Therefore in general, schools built after 1978 do not contain PCBs in caulk. To date it has been found in buildings in the Northeast and Upper Midwest and in joints in concrete water storage basins in the western United States. Activities to address PCBs in caulk are underway in these areas. EPA is encouraging greater awareness of this issue so people can take steps to minimize potential exposure.

Exposure to PCBs can cause a variety of adverse health effects in animals and humans. PCBs have been shown to cause cancer in animals, as well as a number of serious non-cancer health effects, including effects on the immune system, reproductive system, nervous system, endocrine system and other health effects. In humans PCBs are potentially cancer-causing and can cause other non-cancer effects as well. For more information on the health effects of PCBs, go to: www.epa.gov/epawaste/hazard/tsd/pcbs/pubs/effects.htm.

As part of EPA's overall effort to provide guidance to building owners concerning PCB containing caulk in buildings, EPA has produced three other fact sheets and a brochure on PCBs in caulk. These fact sheets can be found on EPA's website at www.epa.gov/pcbaincaulk.

Determining disposal requirements

The PCB regulations separate PCB waste into several categories, with different disposal requirements for each. When assessing your building, it is important to determine what types of PCB waste you will be disposing of.

PCB-containing caulk is considered *PCB bulk product waste* if the concentration of PCBs in the caulk is greater than or equal to (\geq) 50 ppm (*see*, 40 C.F.R. § 761.3). *PCB bulk product waste* includes waste derived from manufactured products containing PCBs in a non-liquid state where the concentration at the time of designation for disposal is \geq 50 ppm PCBs (*see*, 40 C.F.R. §§ 761.3 & 761.62). Caulk with PCB concentrations \geq 50 ppm is not authorized for use and must be disposed of as *PCB bulk product waste* according to 40 C.F.R. § 761.62.

If PCBs have contaminated either the surrounding building materials or adjacent soil, these materials are considered *PCB remediation waste*. *PCB remediation waste* is subject to the cleanup and disposal requirements listed in 40 C.F.R. §761.61.

It is possible that while the following disposal options are available under the federal PCB regulations, state or local regulations may not allow disposal of materials containing PCBs at concentrations ≥ 50 ppm. It is also possible that a landfill which meets the regulatory conditions may choose not to accept materials containing PCBs at concentrations ≥ 50 ppm. When finding a disposal facility, you should ensure that the facility is able and willing to accept the waste.

Disposal options

PCB bulk product waste:

The disposal of *PCB bulk product waste* is regulated under 40 CFR § 761.62. Under this provision, *PCB bulk product waste* must be disposed of in one of three ways: performance-based disposal; disposal in solid waste landfills; or risk-based disposal approval.

Performance-based disposal. The performance-based option allows for disposal of *PCB bulk product waste* in a TSCA incinerator; a TSCA chemical waste landfill; a RCRA hazardous waste landfill; under a TSCA approved alternate disposal method; under the TSCA regulated decontamination procedures; or in a facility with a coordinated approval issued under TSCA. Disposal under this option does not require you to obtain approval from EPA.

Disposal in solid waste landfills. Certain *PCB bulk product waste*, such as PCB-containing caulk, even if the concentration of PCB's in the caulk is ≥ 50 ppm, may be disposed of in non-hazardous waste landfills permitted by states. Disposal under this option does not require you to obtain approval from EPA.

Risk-based option. The risk-based option allows for a site-specific, risk-based evaluation of whether *PCB bulk product waste* may be disposed of in a manner other than under the performance based disposal option or the solid waste disposal landfill option. Disposal of *PCB bulk product waste* under this option requires you to obtain approval from EPA based on a finding that the disposal will not present an unreasonable risk of injury to health or the environment.

Remediation waste:

The disposal of *PCB remediation waste* is regulated under 40 CFR § 761.61. There are three options for management of *PCB remediation waste*:

Self-implementing cleanup and disposal. The self-implementing option links cleanup levels with the expected occupancy rates of the area or building where the contaminated materials are present. The disposal requirements for the self-implementing regulatory option vary based on the type of contaminated material and concentration of PCBs in the

materials, among other things. Cleanup and disposal under this option require you to notify your Regional PCB Coordinator.

Performance-based disposal. The performance-based option allows for disposal or decontamination of the contaminated materials in a TSCA chemical waste landfill; a TSCA incinerator; through a TSCA approved alternate disposal method; under the TSCA regulation's decontamination procedures; or in a facility with a coordinated approval issued under TSCA. Disposal under this option generally does not require you to obtain a separate approval from EPA.

Risk-based cleanup and disposal. The risk-based option allows for a site-specific evaluation of whether PCB remediation waste may be cleaned up or disposed of in a manner other than the alternatives provided under the self-implementing or the performance based disposal options. Disposal of *PCB remediation waste* under this option requires you to obtain an approval from EPA based on a finding that the disposal will not present an unreasonable risk of injury to health or the environment.

Finding a disposal facility for PCB-containing caulk

A listing of TSCA approved disposal facilities is located on EPA's web site at: www.epa.gov/epawaste/hazard/tsd/pcbs/pubs/stordisp.htm.

To find a solid waste disposal facility that will accept PCB-containing caulk, please contact your state environmental agency. Information on how to contact the state agencies is located on EPA's web site at: www.epa.gov/epawaste/wyl/stateprograms.htm.

Ask EPA experts for help addressing PCBs in caulk

If you are considering the risk-based disposal option for either bulk product or remediation waste, you should contact EPA's PCBs in Caulk Hotline at 888-835-5372 or the EPA Regional PCB Coordinator in your area to discuss the requirements.

Find the PCB coordinator for your state at www.epa.gov/epawaste/hazard/tsd/pcbs/pubs/coordin.htm.

EPA is helping to address the issue of PCBs in caulk

EPA is conducting research on how the public is exposed to PCBs in caulk and on the best approaches for reducing exposure and potential risks associated with PCBs in caulk. Where PCBs have been found in the air, soil or in the caulk and other building materials, EPA is committed to helping schools and communities enact plans to reduce exposure. Please contact your regional PCB coordinator at 888-835-5372 for help with assessing contamination and exposure and developing cleanup plans.

This fact sheet is intended solely for guidance and should be used as an informal reference. It does not replace or supplant the requirements of the Toxic Substances Control Act or the PCB

regulations at 40 C.F.R. part 761, and it is not binding on the Agency or individuals. Please refer to the regulations at 40 C.F.R. part 761 for specific requirements relating to PCBs and PCB-containing materials.