Managing Sealants and Coatings Containing PCBs

Guidance for building owners and contractors

What are PCBs?

Polychlorinated biphenyls (PCBs) are a class of 209 toxic man-made chemicals that persist in the environment and bioaccumulate in animals and humans. They were used extensively in many industrial products from the 1950's through 1978. During this period, PCBs were added to some sealants and coatings such as paint and caulking to make them more flexible and last longer. Exposure to PCBs can cause a range of human health effects and environmental impacts. For more information on other potentially PCB-containing materials and how to test for PCBs, visit the Minnesota Pollution Control Agency (MPCA) at http://www.pca.state.mn.us/publications/w-hw4-48a.pdf to view hazardous waste fact sheet #w-hw4-48a, http://www.pca.state.mn.us/publications/w-hw4-48a.pdf to view hazardous waste

Where are sealants and coatings that may contain PCBs located?

PCBs were used as plasticizers in many industrial paints and are most commonly found in areas that required waterproof or high-impact coatings. Caulking commonly surrounds doors and windows and often was used in masonry work; it also may have been used in repairs throughout a structure. You will not be able to determine whether building materials contain PCBs by their appearance, brand, or manufacturer. Deliberate use of PCBs ended in 1978; you may assume structures or portions of structures built after 1979 do not have sealants or coatings deliberately containing PCBs.

When are sealants and coatings that may contain PCBs regulated?

Sealants and coatings that may contain PCBs are not regulated by the MPCA when they are in good condition and will remain in place in part of a structure that will not be demolished or renovated. The U.S. Environmental Protection Agency (EPA), however, has raised concerns regarding indoor airborne exposure to building materials containing PCBs. For more information on PCB exposure and indoor air quality, see EPA Publication #EPA-747-F-09-005, *Preventing Exposure to PCBs in Caulking Material*, available from the EPA website at http://www.epa.gov.

Sealants and coatings that may contain PCBs become regulated by the MPCA as wastes when they are disposed of, either with a structure, such as during a full or partial building demolition, or after they are separated from the structure, such as during an abatement project. Different requirements apply to wastes in these two categories that potentially contain PCBs.

Demolition debris that may contain PCBs

The MPCA will allow, without testing, disposal of demolition debris that may contain PCBs in sealants and coatings, including mastics, sealers, waxes, and manufactured rubber and plastic components in any solid waste landfill permitted by the MPCA or another state, including a demolition, municipal solid waste, and industrial solid waste landfill. Demolition debris contaminated by these wastes may also be disposed in a permitted landfill. However, landfill operators may refuse any waste regardless of MPCA allowances.

If the structure you will demolish or renovate is located in one of the Metropolitan Counties – Anoka, Carver, Dakota, Hennepin, Ramsey, Scott, or Washington – contact your county to determine the county requirements applicable to debris from the structure.

Note: Before demolishing all or part of a structure, in addition to removing other problem materials, you must also remove all separable components that may contain PCBs, including fluorescent and high-intensity discharge (HID) lighting ballasts, motor start capacitors, and electrical transmission or distribution equipment, such as transformers. Manage these wastes as PCB hazardous wastes unless you document they do not contain PCBs at or above 50 parts per million (ppm).

For more information on problem materials that must be removed before demolishing all or part of a structure, visit the MPCA at http://www.pca.state.mn.us/publications/w-sw4-20.pdf to view MPCA solid waste fact checklist #w-sw4-20, Pre-Renovation/Demolition Environmental Checklist.

For guidance on managing lighting ballasts and capacitors once you have removed them, see MPCA hazardous waste fact sheet #w-hw4-48f, Managing PCBs in Ballasts and Small Capacitors at http://www.pca.state.mn.us/publications/w-hw4-48f.pdf.

You may reuse uncontaminated recognizable concrete and masonry demolition debris as a substitute for conventional aggregate without MPCA review. Reuse of any debris potentially contaminated with PCBs, including painted or oil-stained debris, must be approved on a case-by-case basis by the MPCA.

Abatement waste and other separate wastes that may contain PCBs

Sealants or coating wastes from abatement work that may contain PCBs must be managed as a PCB hazardous waste in Minnesota unless you can document they contain less than 50 ppm PCBs. Abatement wastes include removed caulk materials, paint chips, and sandblasting debris. For information on storing and disposing of PCB hazardous waste generated in Minnesota, see MPCA hazardous waste fact sheets #w-hw4-48c, Storing PCBs, at http://www.pca.state.mn.us/publications/w-hw4-48d.pdf. At http://www.pca.state.mn.us/publications/w-hw4-48d.pdf.

Report all PCB hazardous wastes you generate to the MPCA or your metropolitan county.

For more information on other requirements for performing sandblasting or other air-based blasting in Minnesota, see MPCA hazardous waste fact sheet #w-hw4-39a, Sandblasting and Other Air-based Blasting, at http://www.pca.state.mn.us/publications/w-hw4-39a.pdf. For more information on other requirements for performing hydroblasting or other water-based blasting in Minnesota, see MPCA hazardous waste fact sheet #w-hw4-39b, Powerwashing and Other Water-based Blasting, at http://www.pca.state.mn.us/publications/w-hw4-39b.pdf.

Structures to be burned for live burn firefighter training

In Minnesota no structure may be burned except for live burn firefighter training. Do not burn any structure for firefighter training until you have collected at least one composite representative sample from each building material in the structure that may contain PCBs and have documented that they do not contain PCBs at 50 ppm or more.

Note: Live burn firefighter training in Minnesota must be conducted according to the *Live Fire Burn Training Procedures* manual prepared by the Minnesota State Colleges and University System and under a burn permit properly obtained from the Minnesota Department of Natural Resources (DNR). You may obtain a copy of the current manual from the DNR at http://www.dnr.state.mn.us/.

More information

Guidance and requirements in this fact sheet were compiled from the Code of Federal Regulations, Chapter 40, Part 761, and Minnesota Rules, Chapters 7035 & 7045, and incorporates regulatory interpretation decisions made by the MPCA on February 28, 2013. Visit the U.S. Government Printing Office at http://www.gpo.gov/fdsys/ to review the Code of Federal Regulations directly. Visit the Office of the Revisor of Statutes at https://www.revisor.mn.gov/pubs to review the Minnesota Rules.

The MPCA and your Metropolitan County have staff available to answer waste management questions. For more information, contact your nearest MPCA regional staff.

Metro County Hazardous Waste Offices

Anoka	763-422-7093
Carver	
Dakota	952-891-7557
Hennepin	612-348-3777
Ramsey	651-266-1199
Scott	952-496-8475
Washington	651-430-6655
Websites http://www.d	co.[county].mn.us

Minnesota Pollution Control Agency

Toll free (all offices)	1-800-657-3864
Brainerd	218-828-2492
Detroit Lakes	218-847-1519
Duluth	218-723-4660
Mankato	507-389-5977
Marshall	507-537-7146
Rochester	507-285-7343
St. Paul	651-296-6300
Willmar	320-214-3786
Website http://	www.pca.state.mn.us