



Managing Caulking Materials Containing PCBs

Guidance for building owners and construction 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 caulk to make it 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, visit the Minnesota Pollution Control Agency's (MPCA) hazardous waste publications webpage at <http://www.pca.state.mn.us/waste/pubs/business.html>.

Locate caulk containing PCBs

Caulking commonly surrounds doors and windows. Caulking is often used in masonry work and may have been used in repairs throughout a structure. You will not be able to determine whether caulking contains PCBs by appearance, by the brand or by the manufacturer. PCBs were not added to caulk after 1978; therefore, you may assume structures or portions of structures built after 1979 do not have caulking materials containing PCBs.

Regulations for caulk

Caulk is not regulated by the MPCA when it is 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 caulking material 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>.

Caulk that will be removed from a pre-1979 era structure (including a single-family home) is subject to regulation as a waste. The MPCA regulates waste caulking material containing PCBs at a concentration of 50 parts per million (ppm) or more as a hazardous waste. The EPA regulates waste caulking containing PCBs at a concentration of 50 ppm or more as a *PCB bulk product waste*. This fact sheet contains guidance to meet both sets of waste requirements.

The level of regulation on caulking material containing PCBs at a concentration below 50 ppm is less stringent. Specific management requirements depend upon whether it is still attached to the structure, and are discussed in the *Managing non-hazardous caulking material waste* section of this fact sheet.

Determine whether waste caulking material contains PCBs

If a structure built before 1979 will be renovated or demolished, do one of the following:

1. Assume the caulking material contains PCBs at a concentration of 50 ppm or more; remove it during renovation or demolition and manage it as a hazardous waste
2. Test a representative sample of the caulking material to determine the level of PCBs before doing any renovation or demolition; manage it according to the test results

Take a representative sample and test waste caulking material

Ensure that employees or contractors who sample caulking material that might contain PCBs are provided with and use appropriate personal protective equipment (PPE). For help determining the appropriate PPE for your situation, contact the Minnesota Occupational Safety and Health Administration (MNOSHA). See *More information*, page four.

To take a representative sample, collect several portions of caulking material from the sections of the structure to be renovated or demolished. Take care to avoid releasing dust from dry caulking material. Carefully and completely mix the individual portions to form a representative sample. Since you may need to crush or pulverize the portions to mix the sample, take measures to reduce or eliminate exposure. Alternatively, you may wish to have your chosen laboratory mix the sample.

Choose a laboratory that can test the sample using the methods specified in the Federal PCB Regulations at Code of Federal Regulations (CFR), Chapter 40, Part 761.358, and determine the level of PCBs in the caulking material. The Minnesota Department of Health (MDH) maintains a voluntary certification program for environmental laboratories. Although the MPCA encourages the use of a certified laboratory, you are not required to use one. Contact MDH for assistance in locating a certified laboratory. See *More information*, page four.

If testing shows the PCB concentration to be 50 ppm or more, manage it as a hazardous caulking material waste. If testing shows a PCB concentration less than 50 ppm, manage it as a non-hazardous caulking material waste.

Should you decide not to sample and test the caulking material from a structure, you must assume all of the caulk in the structure is hazardous caulking material waste and manage it accordingly.

Manage hazardous caulking-material waste

Remember, caulking material is hazardous when it contains PCBs at a concentration of 50 ppm or more. If you do not have test results showing caulking material from a pre-1979 structure is below that level, you must manage it as a hazardous caulking material waste.

Remove

Remove the caulking material by hand from the section of the structure to be renovated or demolished, including from materials deemed demolition debris. Ensure that employees and contractors use appropriate PPE during removal. Take precautions to avoid releasing dust from dry caulking material.

Store

Store hazardous caulking material waste in compliance with the requirements discussed in MPCA hazardous waste fact sheet #4.48c, [Storing PCBs](http://www.pca.state.mn.us/publications/w-hw4-48c.pdf), at <http://www.pca.state.mn.us/publications/w-hw4-48c.pdf>.

Transport and dispose of

You may not dispose of hazardous caulking material waste at any landfill in Minnesota regardless of whether it is separated from or is still attached to demolition debris.

Transport and dispose of hazardous caulking material waste in compliance with the requirements discussed in MPCA hazardous waste fact sheet #4.48d, [Manifest and Dispose of PCBs](http://www.pca.state.mn.us/publications/w-hw4-48d.pdf), at <http://www.pca.state.mn.us/publications/w-hw4-48d.pdf>.

Report

Businesses located in the non-metropolitan area that generate a total of more than 100 pounds per year of all hazardous waste (including hazardous caulking material waste) must obtain a Hazardous Waste Generator License. Businesses located in the seven-county metropolitan area may need a license when generating any amount. Check with your county (see *More information*, page 4).

To report and get a license (if you need one) you will need to get a Hazardous Waste Identification Number (HWID) from the MPCA. This requirement applies to all businesses generating hazardous waste, including those generating hazardous caulking material waste.

For more information about and obtaining HWIDs, see MPCA hazardous waste fact sheet #1.02, [Obtain a Hazardous Waste Identification Number](http://www.pca.state.mn.us/publications/w-hw1-02.pdf), at <http://www.pca.state.mn.us/publications/w-hw1-02.pdf>. Generators without a Hazardous Waste Identification Number may request one from the MPCA using form #7.09, [Notification of Regulated Waste Activity](http://www.pca.state.mn.us/publications/w-hw7-09.pdf), available on the MPCA website at <http://www.pca.state.mn.us/publications/w-hw7-09.pdf>.

Managing non-hazardous caulking material waste

Although caulking material waste with a PCB concentration below 50 ppm is “non-hazardous,” that does not mean “harmless.” There is still a health concern at any PCB concentration. For that reason, the MPCA recommends that you use best management practices to protect employees and the public when working with caulking material that contains PCBs at any level.

Non-hazardous caulking material removed from a structure

You may dispose of non-hazardous caulking material removed and separated from a structure as a municipal or industrial solid waste. You may not dispose of it as demolition debris.

Non-hazardous caulking material attached to a structure

You may dispose of non-hazardous caulking material attached to a portion of the structure as demolition debris. However, if the caulking material contains PCBs at a concentration of more than 2 ppm, the demolition landfill you use must have PCB caulking material addressed in its Industrial Solid Waste Management Plan. Demolition landfills may decline waste caulking material.

Note: A landfill that can accept nonhazardous caulking material may not be permitted to accept materials containing asbestos. If your waste caulking material may or does contain asbestos, verify with the landfill that it is able to accept materials containing asbestos before you send waste there. The landfill may have special management requirements for materials containing asbestos.

More information

Guidance and requirements in this fact sheet were compiled from the Code of Federal Regulations, Chapter 40, Part 761, and Minnesota Rules, Chapter 7045, and incorporates regulatory interpretation decisions made by the MPCA on January 23, 2012. 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. For information about waste reduction, contact the Minnesota Technical Assistance Program (MnTAP).

Metro County Hazardous Waste Offices

Anoka763-422-7093
Carver952-361-1800
Dakota952-891-7557
Hennepin612-348-3777
Ramsey651-266-1199
Scott.....952-496-8475
Washington.....651-430-6655
Websites [http://www.co.\[county\].mn.us](http://www.co.[county].mn.us)

Minnesota Department of Health

Toll free..... 1-888-345-0823
Metro651-201-5000
Website <http://www.health.state.mn.us/>

Minnesota OSHA

Toll free..... 1-800-342-5354
Metro612-284-5005
Website <http://www.dli.mn.gov/mnosh.asp>

Minnesota Pollution Control Agency

Toll free (all offices).....1-800-657-3864
Brainerd.....218-828-2492
Detroit Lakes218-847-1519
Duluth218-723-4660
Mankato507-389-5977
Marshall507-537-7146
Rochester507-285-7343
St. Paul651-296-6300
Willmar320-214-3786
Website <http://www.pca.state.mn.us>

Minnesota Technical Assistance Program

Toll free1-800-247-0015
Metro612-624-1300
Website <http://www.mntap.umn.edu>

Small Business Environmental Assistance

Toll free1-800-657-3938
Metro651-282-6143
Website <http://www.pca.state.mn.us/sbeap>