Mercury-catalyzed Polyurethane Flooring and Mercury-contaminated Demolition Debris and Soil

Disposal in Minnesota

Mercury is an element that can cause harmful environmental and health effects when disposed of improperly. Because of previous practices, mercury contamination can be found in some soils and demolition debris in Minnesota. In one particular application, mercury was used as a catalyst in some types of synthetic flexible flooring between the 1960s and early 2000s. This flooring, called mercury-catalyzed polyurethane flooring (MCPF), is most commonly found in athletic facilities.

Normally, mercury and mercury-contaminated wastes are prohibited from land disposal in Minnesota under regulations of the Minnesota Pollution Control Agency (MPCA). However, the MPCA will allow some such wastes to be disposed in Minnesota landfills under the conditions discussed in this fact sheet.

Do I have MCPF in my building?

MCPF was most commonly used as a poured-in-place, rubber-like flooring and could be tinted to any color. It was made by many manufacturers under multiple brand names. The only way to determine whether a particular flooring contains mercury is to test a representative (full-thickness) sample using a reputable testing laboratory. The Minnesota Department of Health (MDH) administers a voluntary laboratory certification program. Although you are not required to use a certified laboratory, the MDH or MPCA can help you locate one if you choose.

Must I remove MCPF if I find it?

While Minnesota laws do not require you to remove MCPF, it may continue to release harmful gaseous mercury into a building's air for decades after installation. MDH has published indoor air quality guidance for mercury at http://www.health.state.mn.us/.

Mercury vapor from MCPF can penetrate and contaminate other materials, such as plastic and wood. Attempting to cover or seal MCPF instead of removing it may create more contaminated debris and higher risks and costs.

Ensure that anyone who may be exposed to the flooring or debris during removal (including employees, contractors, and students) is properly protected from exposure to mercury.

How must I dispose of suspected MCPF and related debris?

Before disposing of suspected MCPF and related debris, test representative samples of the flooring and any other debris for both total and leachable mercury content. The type of disposal allowed for the waste will depend on both of these values and is shown in Table 1 on the following page. Total mercury should be determined in parts per million (ppm) and leachable mercury in milligrams per Liter (mg/L).

Regardless of whether the waste is disposed of in a solid or hazardous waste landfill, ensure that the landfill is permitted to accept the waste and that you have performed any pre-treatment required by the receiving landfill or the state in which it is located.

In addition to MCPF and related debris, soils contaminated by naturally-occurring mercury or historical practices, such as the use of coal combustion residuals as fill, may also be disposed according to Table 1.

Table 1: Allowed management of MCPF, related debris, and soils in Minnesota

Total mercury content	Non-hazardous waste (< 0.2 mg/L leachable mercury)	Hazardous waste (≥ 0.2 mg/L leachable mercury)
≤ 4 ppm total mercury	Minnesota or out-of-state solid waste landfill No special handling required	
4 < 10 ppm total mercury	Minnesota or out-of-state solid waste landfill Immediate coverage with 6 inches of soil	Out-of-state hazardous waste landfill or treatment facility
10 - 1000 ppm total mercury*	*MCPF only: Minnesota solid waste landfill with MPCA preapproval or outof-state solid waste landfill Immediate coverage with 6 inches of soi	
	*All other related debris & soil: Out-of-state solid waste landfill	
> 1000 ppm total mercury	Out-of-state solid waste landfill	

More information

Guidance and requirements in this fact sheet were compiled from Minnesota Statutes, Chapters 115A and 116, and Minnesota Rules, Chapters 7035 and 7045, and incorporate regulatory interpretation decisions made by the MPCA on September 3, 2013. To review Minnesota Statutes and Rules, visit the Office of the Revisor of Statutes at https://www.revisor.mn.gov/pubs. The MPCA and your Metro County have staff available to answer waste management and requirement questions.

The MPCA's Small Business Environmental Assistance Program (SBEAP) can provide you with free, confidential regulatory compliance assistance. The Minnesota Technical Assistance Program (MnTAP) can help you reduce your waste generation and risk. Immediately report all hazardous waste incidents, such as spills, to the Minnesota Duty Officer.

Metro County Hazardous Waste Offices

Anoka	763-422-7093
Carver	952-361-1800
Dakota	952-891-7557
Hennepin	612-348-3777
Ramsey	651-266-1199
Scott	952-496-8475
Washington	651-430-6655
Websites	http://www.co.[county].mn.us

Minnesota Technical Assistance Program

Toll free	1-800-247-0015
Metro	612-624-1300
Website	. http://www.mntap.umn.edu

Small Business Environmental Assistance

Toll free	1-800-657-3938
Metro	651-282-6143
Website	http://www.pca.state.mn.us/sbeap/

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	<u>http://www.pca.state.mn.us</u>

Minnesota Duty Officer

Toll free	1-800-422-0798
Metro	651-649-5451
Websitehttps://di	os.mn.gov/divisions/bca/

Minnesota Department of Health

Toll free	1-888-345-0823
Metro	651-201-5000
Website	http://www.health.state.mn.us/