



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 contamination and cost.

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. Additionally, transport the waste in a totally enclosed manner, such as in a truck bed lined and covered with plastic sheeting.

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 solid waste landfill or out-of-state solid waste landfill <ul style="list-style-type: none"> No special handling required 	Out-of-state hazardous waste landfill or treatment facility
$4 < 10$ ppm total mercury	Minnesota solid waste landfill or out-of-state solid waste landfill <ul style="list-style-type: none"> If in Minnesota, immediate coverage with 6 inches of soil 	
10 - 1000 ppm total mercury*	Minnesota solid waste landfill or out-of-state solid waste landfill <ul style="list-style-type: none"> If in Minnesota, immediate coverage with 6 inches of soil and landfill maintains location & quantity records <p><i>*MCPF only:</i> No MPCA preapproval needed</p> <p><i>*All other related debris & soil:</i> Must be preapproved by MPCA</p>	Out-of-state hazardous waste landfill or treatment facility <ul style="list-style-type: none"> Land Disposal Restriction (LDR) may apply
> 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's Small Business Environmental Assistance Program (SBEAP) can provide free, confidential compliance assistance. The Minnesota Technical Assistance Program (MnTAP) can help reduce your waste generation. Report all hazardous waste incidents 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	http://www.pca.state.mn.us

Minnesota Duty Officer

Toll free	1-800-422-0798
Metro	651-649-5451
Website.....	https://dps.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/