Treated Wood
Use, disposal and alternatives for businesses

Background
Treating wood with chemical preservatives or pesticides lengthens its useful life; however, many of the chemicals used in treating wood are toxic to people and the environment. To minimize the potential for treated wood to cause adverse health and environmental impacts, select, use and dispose of treated wood products safely and appropriately.

Guidance for households
In this document, the Minnesota Pollution Control Agency (MPCA) provides guidance to businesses purchasing, using, and disposing of treated wood.

For guidance for households, see MPCA household hazardous waste fact sheet #4.75, Treated Wood - Use, Disposal, and Alternatives for Consumers available on the MPCA's household publications Web page at www.pca.state.mn.us/index.php/household-hazardous-waste.html.

Prevention
Consider how you intend to use treated wood. Although other building materials may not be completely environmentally friendly, they may not have the same potential for adverse impacts to drinking water, groundwater or surface water. For example, consider alternatives:

- Docks made from recycled or new metal or plastic materials
- Untreated cedar for decks and playgrounds
- Landscape blocks
- Steel or reinforced plastic pilings

Before you buy
Before you buy treated wood, ask yourself:
- Will it be used indoors or outdoors?
- Will it come into direct contact with people or animals?
- Will it come into contact with any drinking water source, any surface water (such as a lake or stream), or with groundwater?
- Is there a less toxic or non-toxic alternative?

Then, choose a product that conforms to your intended use.

The U.S. Environmental Protection Agency (EPA) and the wood-treating industry have established guidelines for using treated wood. These guidelines, published as Consumer Information Sheets, are available from lumber suppliers. Ask for them where you purchase your lumber.

Types of wood treatments
More toxic
The following types of treated wood are still in use or commonly found in structures undergoing renovation or demolition. They are generally more toxic; use them only when necessary.

- Chromated copper arsenate (CCA)
  While residential use of CCA was voluntarily discontinued in 2003, you may still find CCA-treated wood in industrial uses. You may also find treated wood, including CCA, in buildings undergoing renovation or demolition.
• **Pentachlorophenol** (PCP or ‘penta’)
  Commonly used for utility poles.

• **Creosote**
  Commonly used for railroad ties and construction pilings.

**Less toxic**
Although the following types of wood treatments are generally less toxic, they still may present a risk to the environment and human health. Some of these types are available for limited use only:

• Alkaline copper quaternary (ACQ)
• Ammoniacal copper zinc arsenate (ACZA)
• Azole compounds, including copper azole (CBA-A and CA-B), cyproconazole, and propiconazole
• Borate compounds, including disodium octaborate tetrahydrate (DOT)
• Copper dimethyldithiocarbamate (CDDC)
• Copper naphthenate
• Micronized copper-based compounds (MCQ, MCA, and μCA-C)
• Copper-8-quinolate (Oxine copper or Oxine-Cu)
• Copper dimethyldithiocarbamate (CDDC)
• Bis-N-cyclohexyldiazeniumdioxy copper (Copper HDO, Cu-HDO, or CX-A)

**Use guidelines**
Guidelines for the use of any treated wood include:

• Use the smallest amount of treated wood necessary.
• Do not use any type of treated wood for applications in which the wood will come into direct or indirect contact with drinking water supplies. Incidental contact is acceptable. An example of incidental contact is in docks or bridges, where treated wood is used for decking and not pilings. Less toxic alternatives exist for many of these uses; choose them whenever possible.
• Do not use any type of treated wood where the wood will come into contact with human or animal food or with beehives. Examples of uses to avoid include cutting boards, countertops, animal bedding, feed bunks, and mulch.
• Do not use CCA-, PCP-, or creosote-treated wood for residential use, for playground equipment, or in any use in which it may come into contact with domestic animal or livestock drinking water.
• If you raise organic crops or livestock, carefully review your certification standards. Treated wood use is heavily restricted by most organic certification standards and agencies.

**Handling precautions**
To protect your health, be careful when handling treated wood. Ensure all employees and others near the treated wood-handling area are properly protected.

• Wear gloves when handling treated wood.
• Wash hands and exposed areas thoroughly before eating, drinking, using the bathroom, or using tobacco products after handling treated wood.
• Wear a properly fitted dust mask and eye protection when cutting, drilling, and sanding treated wood.
• When possible, perform work that may generate treated wood dust or particles outside.
• Launder clothing worn when handling treated wood separately from other laundry.
• Contain and collect all dust, particles, and debris from treated wood. When disposing of this waste, follow the guidance in the ‘Disposal requirements’ section below.

**Reuse and recycling**
You may reuse treated wood as structural lumber as long as it is in good condition and you follow the use guidelines and handling precautions discussed in this document.

Do not recycle treated wood into mulch, compost, any type of fuel, or other wood- or fiber-based products nor use it as fill material without a specific beneficial use approval from the MPCA.

Do not burn treated wood at any residence or business either for fuel or for disposal, except for permitted solid waste incinerators.

**Disposal requirements**
**Do not** dispose of treated wood at a demolition landfill in Minnesota, even if evaluation shows it to be nonhazardous. Rather, segregate treated wood from other demolition debris and dispose of it at a permitted, lined, industrial or mixed solid waste landfill.

**Do not** chip, grind, burn, or bury treated wood for disposal.

**Do not** donate or sell treated wood for any prohibited use.
In Minnesota, the following items may be disposed of in a permitted, lined, industrial or mixed solid waste landfill provided the landfill operator is notified and approves the disposal. In this case, you do not need to evaluate to determine whether the waste is hazardous.

- Treated wood used for structural lumber (includes wood treated with all of the compounds discussed above)
- Dust, particles, and debris generated as a result of its structural use

Before disposing of treated wood used for other purposes, such as mulch or fiber-based products, evaluate and document that it is not a hazardous waste. If you do not evaluate, manage it as a fully-regulated hazardous waste. For more information on evaluating wastes, see MPCA hazardous waste fact sheet #1.01, Evaluate Waste; Determine Generator Size, available on the MPCA's Hazardous Waste Publications Web page at www.pca.state.mn.us/waste/pubs/business.html.

More information
Metropolitan counties and the Minnesota Pollution Control Agency have staff available to answer waste management questions. For more information, contact your metropolitan county hazardous waste office or the MPCA office closest to your county.

The Minnesota Technical Assistance Program (MnTAP) has staff who are able to help you find ways to improve efficiency and reduce waste.

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 County .............................. 952-496-8475
Washington County ................... 651-430-6655
Web sites ..................... www.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
Web site ............... www.pca.state.mn.us

Minnesota Technical Assistance Program
Toll-free .......................... 1-800-247-0015
Metro area ..................... 612-624-1300
Web site ..................... www.mntap.umn.edu