Pressure-treated wood: how safe is it?

For the last 70 years, people have been using pressure-treated (PT) wood for projects where resistance to moisture, rot, and insect damage is important: porches, decks, play sets, fences, and other outside structures. Most professionals recommend using PT wood for all outdoor projects. However, many people have questions about the safety of this material and the chemicals used to preserve the wood.

Until 2003, the most common preservative used was chromated copper arsenate (CCA). Health concerns led to replacement of CCA by a range of other chemicals. Most contain high levels of copper, which is less toxic than CCA because it is not absorbed by the body.

There are various combinations of copper preservatives now available, but all require some precautions. First, you need to match the PT lumber you buy to how you will be using it. There are several levels of chemical treatment, ranging from wood infused with the least preservative to wood with the most preservative. Always let the salesman know the eventual location of the PT lumber you will be using – above, on, or below grade – so that you can purchase the appropriate type for your project.

Second, wood preserved with copper is much more corrosive than the old CCA-treated lumber. When working with this material, it’s best to choose only stainless steel or hot-dipped galvanized connectors (nails, screws, bolts, anchors, etc.) designed for use with the newer copper-based PT wood. And because these new wood treatments are especially corrosive to aluminum, use vinyl or copper flashing, or wrap the wood in a protective rubberized membrane.

Third, sawdust from PT wood irritates eyes, skin and nose. Make all cuts outdoors, and lay down a heavy disposable tarp to collect the debris. Always wear a dust mask, goggles, and gloves, and wash your hands thoroughly after handling PT wood.

Finally, plan to apply a clear wood preservative every year or two. Not only will it slow drying and shrinkage, helping to maintain a smoother surface to the wood, but it will significantly reduce the amount of preservative that will otherwise leach to the surface.

But, what if you have a deck or other structure made with the old CCA-treated lumber? If it’s otherwise in good condition, don’t remove it – tearing it out may release more chemical than leaving it in place. However, apply a penetrating oil finish as needed to any wood surface that has human contact, to lessen or eliminate human and animal exposure to CCA in existing decks.