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**STANDARD FOR THE CARE OF PRESERVATIVE-TREATED WOOD PRODUCTS**

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Jurisdiction: AWWA Subcommittee T-7

Reaffirmed in 2000. Recent amendments were made in 1998, 1999, 2001, 2002, 2006, and 2008.

This AWWA Standard is promulgated according to an open, consensus procedure.

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**1. Scope:** This Standard prescribes the requirements for care of preservative treated poles, piles, lumber and ties in plants, storage yards and on job sites. It also prescribes requirements for field fabrication, field treatment and management of used treated wood products.

**2. Handling:**

**2.1 General.** Treated wood products shall not be dragged along the ground. The use of cant hooks, peavies, slings, tongs and lifting devices is permissible within the limits specified in this Section.

**2.2 Piles.** Treated piling may be handled with pointed tools provided that they are used not more than 1.5 meters (5 feet) from the ends of the poles.

**2.3 Poles.** The use of handling tools and loading devices is not permitted from 300 mm (1 ft) above to 600 mm (2 ft) below the ground line. Poles are not acceptable if they contain indentations attributed to loading or handling slings that are 6 mm (one-quarter-inch) or deeper over 20% or more of the pole circumference, or more than 13 mm (one-half inch) deep at any point. Other indentations or abrasions, such as from forklifts or chain saws, shall not be more than one-tenth the pole diameter at the point of damage up to a maximum of 25 mm (one inch). Such damage is permitted in an oversized section, where the excess of wood shall be taken into consideration in evaluating the effects of the damage. In any case, the circumference for a given class is still required to be not less than the specification minimum.

**3. Storage:**

**3.1 General.** During storage, treated wood products shall be stacked on treated or non-decaying skids of such dimensions and so arranged as to support the material without producing noticeable distortion and to permit an air space beneath the material. Storage areas shall be free of debris, decayed wood and vegetation (fire hazard) and shall have sufficient drainage to prevent treated wood products from contact with standing water.

**3.2 Lumber.** Treated lumber, when dried after treatment, should be stored under shelter or be covered with a moisture resistant wrap.

**4. Loading and Shipping** (*Deleted in 1999*)**5. Field Fabrication:**

**5.1 General.** Whenever practical, all adzing, boring, chamfering, framing, gaining, incising, surfacing, or trimming shall be done prior to treatment. When fabrication after treatment is necessary, the treated wood products shall be

treated as described in Section 6.

**5.2 Lumber and timbers.** When lumber or timbers are used as columns, the end in ground contact shall be an original untrimmed end or shall be field treated in accordance with section 6.2 regardless of species or thickness.

**5.3 Poles.** Field fabrication in the ground line area is not permitted.

**6. Field Treatment:**

**6.1 General.** All cuts, holes and injuries such as abrasions or holes from removal of nails and spikes which may penetrate the treated zone shall be field treated. An AWWA accepted preservative system, determined appropriate in accordance with Section 7 of this Standard, shall be used for field treatment.

Field treatment preservatives shall be applied in accordance with the product label. The application method shall coat any surface that is exposed by damage or field fabrication while not using excess preservative. Any excess preservative not absorbed by the wood product shall be cleaned from the surface prior to the use of the product. Bored holes for connectors or bolts may be treated by pumping coal-tar roofing cement meeting ASTM D5643 into holes using a grease gun or similar device. Careful attention should be given to materials placed into aquatic environments. These materials shall not be used unless the field treated surface is clean, dry and free of excess preservative.

**6.2 Lumber and timbers.** Lumber and timbers with a nominal thickness of 150 mm (6 inches) or less which are used in above ground applications and are of a sapwood species such as southern, red or ponderosa pine, generally do not require field treatment to provide a good service life. However, material with narrow sapwood faces or having heavy heartwood in cross section should be field treated in accordance with Section 6.1 when cut or drilled. When lumber is from a heartwood species such as hem-fir, larch or Douglas-fir, it should be field treated in accordance with Section 6.1.

**6.3 Timber piles.** Foundation piling cut off to grade or near grade which will be concrete capped, shall be treated with a liberal application of copper naphthenate until visible evidence of further penetration has ceased. This cut-off surface is an important stress transfer point from the concrete cap to the piles. The copper naphthenate solution must have minimum 2.0% copper metal. Marine piling exposed to the weather shall be capped with a permanently fixed coating such as epoxy or with conical or other caps attached to the piles. Timber piling supporting timber structures where the piles are cut off shall be treated with a liberal application of copper naphthenate until visible evidence of further penetration has ceased. In addition, a layer of an appropriate material shall be folded over the side

of the pile a minimum of 2 inches and securely fastened and completely covered with 20 gauge or thicker galvanized metal or aluminum sheet. All cuts, injuries, and holes as would occur from removal of nails or spikes that would penetrate the treated zone, as well as bolt holes for connections, shall be treated by applying coal-tar roofing cement meeting ASTM D5643. The surface to be so treated must be clean, dry, and free of excess preservative. Cut-off pile ends may not be burned in open fires, in stoves or fireplaces, and must be disposed of in accordance with Federal, State, and local requirements. Disposal in landfills is the normal requirement. Treated wood may be burned in commercial or industrial incinerators or boilers. Burning shall be done in compliance with Federal, State, and local regulations.

## 7. Preservatives:

**7.1 General.** The appropriateness of the preservative system for field treatment shall be determined by the type of preservative originally used to protect the product and the availability of a field treatment preservative. Because many preservative systems are not packaged and labeled for use by the general public, a system different from the original treatment may need to be utilized for field treatment. Users shall carefully read and follow the instructions and precautions listed on the product label when using these materials. The preservatives designated in sections 7.1.1, and 7.1.2 are accepted and available for field treatment.

**7.1.1 Copper naphthenate.** Copper naphthenate preservatives containing a minimum of 2.0% copper metal are recommended for material originally treated with copper naphthenate, pentachlorophenol, creosote, creosote solution or waterborne preservatives. Use of copper naphthenate preservatives with a minimum of 1.0% copper metal is appropriate in those regions of the country where the higher concentration material is not readily available.

**7.1.2 Inorganic boron.** Inorganic boron preservatives are limited to use in applications not in contact with the ground and continuously protected from liquid water. They may be used for field treatment of material originally treated with any waterborne treatment as long as this condition is met. (Solutions shall have a minimum concentration of 1.5% (B<sub>2</sub>O<sub>3</sub> basis).

## 8. Management of Used Treated Wood:

**8.1 General.** The most desirable alternative for treated wood

that has been discarded, is for reuse in a similar application. Opportunities to reuse, recycle, compost or combust with energy recovery should be evaluated for used preservative treated products prior to committing to land disposal.

**8.2 Reuse.** Treated wood shall be reused in a manner consistent with the use of similar treated wood products to the extent possible. Often material originally intended for structural applications can be reused for non-structural applications as a substitute for new treated products. Treated wood shall not be used for animal litter nor shall such shavings be used for animal bedding.

**8.3 Burning.** Treated wood shall not be burned in open fires of any kind, stoves, fireplaces, or residential boilers. Some treated wood products may burn at temperatures much higher than untreated wood and/or may contribute toxic chemical to the smoke or ash. Treated wood removed from commercial or industrial use (e.g. construction sites) or debris from construction may be burned only in commercial or industrial incinerators or boilers. Burning of any treated wood product should be in compliance with Federal, State, and local regulations.

**8.4 Disposal.** Used treated wood which cannot be recycled should be discarded in accordance with Federal, State, and local requirements. These regulations may require different restrictions for individuals and businesses. The following are general guidelines for disposal of treated wood products. According to the United States Environmental Protection Agency (US EPA, July 1984), homeowners may dispose of treated wood by ordinary trash collection or burial. Businesses are encouraged to utilize landfills designed to ensure proper management of treated wood products. Businesses may be held to more stringent requirements than individuals when disposing of treated wood products.

**9. Public Awareness:** Efforts should focus on informing the general public about proper handling, uses, and disposal of treated wood products. Consumers should be provided copies of preservative specific Consumer Information Sheets (CIS) or Consumer Safety Information Sheets (CSIS) upon the purchase of treated wood. Consumer Information Sheets and Consumer Safety Information Sheets are available through the treated wood supplier and are also posted on the web at [www.ccasafetyinfo.com](http://www.ccasafetyinfo.com).