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FACT SHEET

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Preservative-Treated Wood: A Sustainable Consumer Choice

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Forests provide us with a renewable, recyclable, biodegradable, durable, aesthetically pleasing, and genetically diverse material we call wood. Unfortunately, our predominantly urban society often views wood as low tech and not cutting edge in spite of its many green aspects. Moreover, preservative-treated wood products frequently draw negative reactions from consumers. Many people shy away from this environmentally sustainable resource, opting instead for energy-intensive construction materials made from non-renewable resources. Concrete blocks, steel studs, and plastic lumber are just some of the products found around our homes that lack treated wood's environmental friendliness and carbon neutrality.

Ecological Sustainability

Treating wood with preservatives directly contributes to the sustainability of our forests. Using wood that has been preservative-treated significantly increases that product's service life. This ensures a more orderly flow of timber resources from our forests. Nonpoint source impacts to neighboring properties and our watersheds can also be indirectly reduced. Additionally, treated wood supports habitat diversity. Barnacles are often seen attached to marina pier pilings, and freshwater bridge and deck pilings provide excellent structure for recreational and sport fishing.

Environmentally Friendly Processing

Most of our treated wood products, 70%, are used in residential applications, and strict federal regulations are in place to safeguard the safety of consumers. The wood preservation industry as a result conducts the treating process in an environmentally responsible manner. Self-imposed standards, overseen by the American Wood Protection Association, are followed that actually surpass criteria set by the Environmental Protection Agency. Innovative research in recent years has redirected formulations to become both safe and green. In fact, many of today's wood preservatives are so benign they can now even be found in grocery and personal care products, such as food additives and shampoos.

Figure 1. Some common wood preservatives found in commercial shampoos (courtesy of Dr. Tor Schultz, Mississippi State University).

Applicability, Accessibility, Accountability

Treating wood with preservatives helps to ensure (1) our homes are structurally secure, (2) power is supplied to our homes, (3) recreation is provided in and out of our homes, and (4) access to our parks and forests is

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made available, or even improved upon. Most of the kiosks, boardwalks, and observation decks built at our national parks, monuments, and refuges are constructed from treated wood, as it is better able to withstand the onslaught of moisture, insects, and decay fungi in a forested setting. Treated wood also opens the world to us through the construction of roads and bridges. Perhaps most importantly, our facilities become accessible to all of our citizens by becoming Americans with Disabilities Act compliant through the building of ramps and guardrails.

Figure 2. Recreational facilities utilizing preservative-treated wood. Top, a ramp for scaling a bluff at a state park. Bottom, a city park pavilion.

Recycle, Reuse, Renew

Treated wood products used in industrial applications are removed from the field when they reach the end of their service life. Large volumes of utility poles and railroad ties, among others, are decommissioned each year. Current recycling methods remove the preservatives from the treated wood. The purged wood is then reused in other products, such as laminated posts and poles, and manufactured treated wood plastic composites. This greatly enhances the life cycle management of treated wood.

Figure 3. Laminated utility poles constructed from decommissioned preservative-treated wood.

Conclusion

Our wood products today are the result of conscientious decisions made decades ago. Growing trees produces jobs, economic activity, local taxes, and community support. As such, preservative-treated wood products further provide economic, environmental, and social benefits for our communities. These benefits should be considered in consumers' purchasing decisions of "green" or eco-friendly products for the home.

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