# (;H'I'\_P'K)

VOLUME 13 • NUMBER 1 OCTOBER 1994

## New Treated Lumber Earns Environmental O.K.

by Ted Cushman

ACQ Preserve, a new type of pressure-treated wood, will now carry a "Green Cross and Globe" label. The label was awarded by Scientific Certification Systems (SCS), an independent group that rates the environmental impact of manufactured products. ACQ Preserve is currently the only pressuretreated wood to carry the group's "green" label.

The SCS stamp of approval bears out the manufacturer's claim that its new patented formulation creates far less toxic waste than the widely used chromated copper arsenate (CCA).

Chemical Specialties Inc. (CSI), one of the country's three major wood treaters,



ACO Preserve, the new pressure-treated lumber product that contains no arsenic or chromium, now carries a "green label" certifying its environmental advantages.

introduced ACQ Preserve early this year. CSI will continue to produce CCA-treated lumber, which costs less than ACQ Preserve, but the

company is offering its new product as an "environmentally advanced" alternative.

Because ACQ Preserve contains no chromium or arsenic.

CSI says that the new product produces 84 times less hazardous waste during its life cycle than CCA.

Comparing the chemicals. Pressure-treated lumber made with CCA has been in use for decades. The copper, chromium, and arsenic in the treating formulas make the wood immune to fungus and insect attack. Copper, though effective as a fungicide, is a common trace element in the environment and, in fact, is found in many foods. But chromium and arsenic are highly toxic — both are known carcinogens. Arsenic is second only to lead on the **Environmental Protection** 

continued

## **Speedy Filing Reduces Workers Comp Costs**

Rising workers comp rates have hit employers hard in the last decade. In building construction, where injury rates are high, comp costs have become unmanageable. The rising cost of medical care, increased attorney involvement in the claims process. and an increase in long-term disability claims for nonspecific complaints like back pain are identified as the major forces pushing up premiums.

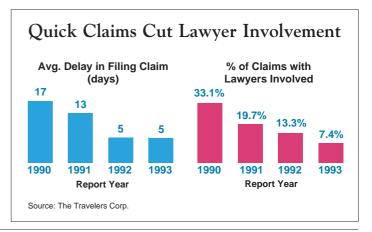
Recently, one insurance company, The Travelers, reported good success in lowering comp costs with a strategy based on a simple concept: fast action on claims. The key is a new phone-in system for claims-reporting. Construction companies using the system saw a big drop in lawyer involvement and lost-time injury claims, along with a decrease in the average cost per claim. Although the data reported by The Travelers is based on experience with the company's unique claims management system, there's a lesson in the statistics for all employers and insurers: Act fast on claims and you'll cut vour losses.

The Travelers statistics are striking. Half of all phoned-in claims were received in less than four days, compared with 17 days for mailed claims. For phoned-in claims, lost-time claims were 19% fewer, and the involvement of lawyers was cut in half. Overall, attorney involvement in comp cases handled by The Travelers has dropped from 33% to 7% in the four years since telephone claim reporting was adopted.

The company says that when a claim is phoned in, a claim

number is assigned right away. Within 24 hours, an insurance adjuster contacts the injured worker, the physician, and the employer. "We make sure the worker understands the benefits," says company spokesman

continued



#### Treated Lumber,

continued

Agency's list of priority hazardous substances, and the last factory producing arsenic in the U.S. was shut down by the EPA in 1986. That means that the arsenic used to treat lumber, which accounts for 80% of the arsenic used in the U.S., has to be imported. "We get it from third-world countries that have lower safety standards," says Frank Kicklighter of CSI.

ACQ Preserve also contains copper, which Kicklighter says is the "workhorse" of all wood-treating formulas. But CSI has replaced the chromium and arsenic with other substances. The "A" in ACQ stands for ammonia, which serves to carry the copper into the wood. The "Q" stands for quaternary or "quat," a disinfecting detergent containing nitrogen that is commonly found in shampoo and other consumer products. "Hospitals put quat in mop

water," Kicklighter says, adding that some western lumber is routinely surface-treated with quat to prevent mildew staining. Though it isn't highly toxic, quat does function as a pesticide, making the wood inedible to termites and certain rare copper-resistant fungi.

Kicklighter believes that it is only a matter of time before arsenic will be unavailable for lumber treating because "the regulatory noose is tightening." ACQ Preserve is CSI's attempt to get a new product into lumberyards before that happens. "Otherwise," says Kicklighter, "the market will disappear."

Carl Grable of the EPA's pesticides office confirmed that the active ingredients in ACQ Preserve are "much less toxic" than CCA. While the CCA chemicals themselves can only be handled by a licensed applicator, the EPA lists ACQ Preserve's treating formula as a general-use pesticide, requiring

no special license to apply.

The EPA does not classify pressure-treated wood as a hazardous material, because the chemicals used to treat it become chemically bound to the wood and are released only in tiny amounts. However, the chemicals for CCA have to be mined, refined, transported, and put into the wood. Spills during transportation or manufacturing can be very serious.

Price and quality. Lumberyards say the higher price of ACQ Preserve makes it hard to sell to contractors, who generally don't think of CCA wood as hazardous. "Pressure-treated prices are through the roof anyway," said one lumber salesman. "The guys already have sticker shock."

But a salesman at another lumberyard said do-it-yourselfers were buying a lot of ACQ Preserve, indicating a strong interest by homeowners. This dealer said his only problem was that he couldn't restock the product fast enough: "We sold our first truckload faster than I thought we would, and then I couldn't get more fast enough to keep up with the demand."

A contractor who built two decks with ACO Preserve for a customer concerned about toxic chemicals said the treated pine was easier to work with than CCA lumber. "It cuts more like spruce," he said. "It doesn't wear out your saw blades, and it doesn't split when you nail it." He said the appearance of the wood was better than the CCA lumber that he's used to — "fewer knots and a nicer grain" but he noted that part of one shipment showed warping and checking.

For information about ACQ Preserve, call Chemical Specialties Inc. at 800/421-8661. □

#### TAX TALK

## Who Can Still Deduct Home Office Costs?

People who earn their money outside the home, but do important business paperwork at home — like many contractors — may be the largest group to lose their home office tax deduction in last year's *Soliman* Supreme Court decision (*Eight-Penny News*, 3/93). But some contractors can still deduct home office expenses if they're careful to follow the rules.

If you're a plumber, landscaper, carpenter, painter, or subcontractor, you usually can't prove that your office is your principal place of business. In this case, the work you do on the job site is the essence of your professional service, and the things you do in your home office are not the principal activities. Also, you probably spend less time working in your home office than you spend on the job site. So you would not be entitled to deduct your home office expenses.

General contractors may have a better case. They often spend a lot of their time performing in-office functions, like conferring with clients about design or materials choices, consulting with architects, and hiring and meeting with subs.

If this sounds familiar, you may be able to treat your home office as your principal place of business. But you'll have to demonstrate that the

essence of your trade requires you to take on business management functions like those listed above. And if you spend the majority of your business time at home performing those functions, be prepared to document that fact.

In addition, there's a strict rule that you must use the home office *exclusively* for business. An office that doubles as a den or guest room, or that you use after working hours for personal use, won't qualify. To convince the IRS, you should set up your home office so that it is fit only for business use. Have typical office furniture, like a desk and filing cabinet, and avoid personal accessories, such as

beds, dressers, or TV sets.

The office doesn't have to take up a whole room. However, if it doesn't, some kind of physical barrier, even a room divider or bookcase that defines the business space, makes your case easier to prove.

Even better is to set up your office in a detached structure. In that case, the office still has to be used regularly and exclusively for business, but it doesn't have to be your principal place of business, nor must it be used to meet with clients or subs.

In any case, before you try to claim this deduction, consult an experienced tax professional.

### STATE BY STATE

New York. Democratic Governor Mario Cuomo announced a \$50 million pilot program to finance low-interest, reducedpoint mortgages for up to 100% of a home's purchase price. Called the Construction Incentive Program, the plan is run by the State of New York Mortgage Agency. For information, call 800/382-4663.

Vermont. Workers comp rates here will rise an average of 9.3%, less than half of the 21% hike proposed by the insurance industry. State officials credited this year's comp reforms for limiting the rate rise, but business leaders in the state are still criticizing the new reform package as a "band-aid solution."

Connecticut. Builders in Connecticut are concerned about proposed lead abatement legislation that would allow renters to withhold rent from landlords until paint containing lead is removed from the rental unit. An HBA spokesman said the move would hurt the construction market by reducing property values.

#### New Hampshire.

The New Hampshire Housing Finance Authority has made available \$30 million in low-interest mortgage funds to assist low and moderate-income families. For information, call NHHFA at 603/472-8623.

## Termites Survive Roasting, Shocking, And Microwaving

## But fumigation finally gets 'em

Remember "Villa Termiti," the California condo custom-built to be a dry-wood termite snack shack (Eight-Penny News, 1/94)? Tests comparing standard termite control measures with high-tech innovations have been underway there since late last year. With results in from the first round of tests, University of Calif.-Berkeley researchers report that tried-and-true methods have placed first in the competition — at least in terms of the body count.

Whole-house fumigation with sulfuryl fluoride gas left no survivors among the test termites placed in the house. The same was true of fumigation with synergized methyl bromide, a method in which a reduced amount of the poison gas is mixed with carbon dioxide and pumped into the house. Neither fumigation method caused any damage to the building.

Alternative methods. For the fumigation techniques, the house has to be covered with a tarp to contain the noxious fumes, and of course the occupants have to get out of the building — along with their pets and foodstuffs. Alternative techniques tried out at Villa Termiti seek to avoid the use of poisons and reduce the inconvenience to building occupants. Unfortunately, the alternative measures proved less effective in this test.

- Liquid nitrogen poured into wall cavities at nearly -300°F to freeze the termites did indeed wipe out the bugs. But holes in the drywall had to be fixed, and some drywall panels warped.
- Heat fumigation, which involves wrapping the house

- in a tarp and heating the interior to 187°F, left 1% of the termites alive (survivors stayed cool next to the concrete foundation). Some warping of test boards was reported.
- Microwave bombardment of the test boards left a few termites alive. Researchers said some test boards showed signs of burning.
- Electric shock treatment of the whole house left about a fifth of the termites alive.
  Some damage was reported to boards that were drilled to receive electrodes. □



Fumigation techniques that require the whole house to be covered with a tarp proved most effective in head-to-head termite control tests.

## **Ruling Eases Canadian Wood Imports**

A long-running U.S.Canadian dispute over lumber trade seems to be over. A trade panel made up of representatives from both countries has rejected a final U.S. appeal, and ruled that Canadian lumber production and export practices are fair to the U.S. The ruling means that trade duties placed in escrow by Canadian lumber companies will be returned

(\$600 million worth), and future Canadian exports to the U.S. will flow unhindered.

The Canadians will be glad to get their money back, but the effect on lumber prices in the U.S. is likely to be slight, analysts say. Canadian lumber is a big factor in U.S. markets, amounting to 30% of the wood sold here. But the duty on Canadian imports was only 6.5%, small compared

with the ordinary price swings in the lumber market. Canadian producers reportedly plan to continue charging what the market will bear, even though their export costs will now decrease. And labor problems and growing logging restrictions in Canada's western provinces will probably place an upper limit on wood supplies coming out of Canada. □

## Cellulose Solves Attic Heat Loss

The cheapest way to insulate attic spaces is usually to blow in loose-fill insulation, either fiberglass or cellulose. But several years ago, researchers at Oak Ridge National Laboratories reported that homeowners who install standard loose-fill fiberglass in their attics might not be getting their money's worth — particularly in cold climates. Controlled tests at Oak Ridge showed that when the outside air became extremely cold,



An added layer of blown-in cellulose will eliminate convective losses in attics insulated with loose-fill fiberglass, researchers say.

convection currents in the insulation cut the effective R-value of the insulation. When outside air reached 0°F, the R-value losses were as much as 50%.

When the loose insulation was capped off with fiberglass batts, however, the researchers discovered that the convection currents were blocked and the total R-value stayed the same at any temperature. Follow-up tests at Oak Ridge now indicate that capping the

loose-fill fiberglass with 2 inches of blown-in cellulose will also stop the convective losses, in addition to raising the total insulating value by R-8.

In a very cold climate, adding the extra cellulose would save a typical homeowner around \$14 in annual heating costs. □

#### Speedy Action,

continued

Fran Onofrio. It's reassuring for a hurt worker to get attention right away, he says.

Delays are costly, says Onofrio: "The worker says, 'Hey, I haven't heard from my employer in a week, maybe I better call a lawyer.' "The Travelers says studies indicate that lawyer involvement adds big legal costs without increasing worker benefits.

Making quick contact also cuts lost-time claims, in which workers collect benefits for lost pay. The Travelers urges employers to bring injured workers back for light-duty work if possible — preferably

before the state waiting period has expired, so the worker doesn't start getting checks. "The whole objective is to get people back to work," says Onofrio. "That way, they don't get into the mindset that they like to stay home."

Onofrio also emphasizes that it's important to avoid confrontation. Employers know that comp claims can raise their premiums, he says, but "we try to have employers not take the adversarial approach." Instead, Onofrio advises, use tact: "Get the worker on the phone and say, 'How are you, when can you come back?"—it's proven that this soft approach works."

#### FROM WHAT WE GATHER

The U.S. Supreme Court has limited municipal "takings" of private property. The court ruled against the city of Tigard, Ore., which wanted a plumbing company to donate land for a bike path, a storm drainage channel, and a greenway as a condition for a permit to enlarge its building. The court said the city had not shown that the proposed building project had created a need for such a community use of the plumber's land. In the future, said the court, cities must show that requiring property owners to give up land in exchange for a permit "is related both in nature and extent to the impact of the proposed development." The U.S. Constitution says private property may not "be taken for public use without just compensation."

Need funding for an affordable housing project? The major sources are listed in the Affordable Housing Index, released this fall by Affordable Housing Finance magazine. The index is available for \$150 from Business Communications Services, 220 Montgomery St., Box 2061, San Francisco, CA 94104; 415/546-7255.

Swords into plowshares department: Steel for the frame of Southern California Gas Co.'s new Energy Resource Center building in Downey, Calif., was obtained in part by melting down a retired U.S. Navy attack submarine from World War II. Rebar for the project was made from melted-down weapons confiscated by the L.A. County Sheriff's department.

Got a question about energy-efficient construction or renewable energy? Get your answer from a free government hotline run by the Department of Energy. Try your question out on the Energy Efficiency and Renewable Energy Clearinghouse at 800/523-2929. Operators are standing by.

There's a lot of reroofing work out there, according to statistics from the Census Bureau. Around 16 out of every 100 homes get new roofs in any given year, surveys show. Most roof replacements cost more than \$500.

"Quick and accurate sizing of structural members" — that's the promise for WoodWorks, a software package from the American Forest & Paper Association that the organization says "automates the design process." The user lays out a grid, drops in columns, walls, beams, and joist areas, and loads the structure. Then the computer spits out a complete list of structural materials and sizes. Demo copies can be ordered by fax from AF&PA (613/731-7899). The full program costs \$295. For details, contact the American Wood Council, American Forest & Paper Assoc., 1111 19th St. N.W., Washington, DC 20036; 202/463-2733.