

Wood Dust Listed as Cancer Cause

Fine hardwood dust may cause rare nasal cancers, but risk is low

The U.S. Department of Health and Human Services National Toxicology Program has listed wood dust as a known cause of cancer in its *Tenth Report on Carcinogens*, released in December 2002. The U.S. lags behind international listings: The International Agency for Research on Cancer (IARC) listed wood dust as a human carcinogen in

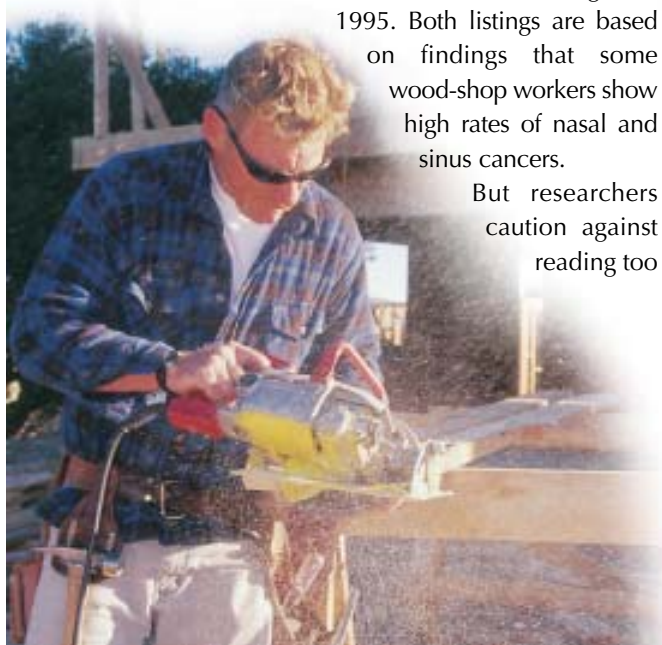
1995. Both listings are based on findings that some wood-shop workers show high rates of nasal and sinus cancers.

But researchers caution against reading too

much into the listings. "Persons occupationally exposed to high levels of wood dust do have a substantially increased risk of cancer of the sinuses and nasal cavities (from two to ten times higher)," says Dr. Thomas Vaughan of the Hutchinson Cancer Research Center at the University of Washington. "However, sinonasal cancer is a very rare disease — approximately 2,000 cases occur in the U.S. per year in the general population. Thus, the absolute risk of sinonasal cancer, even in a person highly exposed to wood dust, such as a furniture sander, remains very low."

The high risk was detected in shop workers, not field carpenters, and it's associated primarily with hardwood dust, not softwood dust. But some softwoods, including red cedar and redwood, can cause allergic reactions, notes University of British Columbia professor Paul Demers, who studies Canadian sawmill workers. "We have people in B.C. who can't work in the mill anymore because of allergies," he says.

Kay Teschke, an industrial hygiene professor at UBC, says a prudent response depends on the context. "In a shop, not just because of cancer but because of other respiratory diseases associated with wood dust, there is every argument to have local exhaust ventilation on every stationary tool. There are lots of well-designed systems to draw the dust away. But if I were doing framing on site, I would just say next time I buy a circular saw I would get one that has dust control. If I had one now without it, I wouldn't be too concerned. The highest exposures are associated with power sanding — sanders should definitely have dust control."



EPA Phase II Stormwater Rules Get Off to Stumbling Start

Under 1987 changes to the federal Clean Water Act, contractors who expose more than five acres of soil have long been subject to Phase I of the Environmental Protection Agency's Nonpoint Pollution Discharge Elimination System, or NPDES (pronounced "nip-deez"), which requires builders on large sites to create a written stormwater plan, file notification, and practice erosion control mea-

sures. Phase II of the program, which kicked in on March 10, extends the requirements of NPDES to "small construction activities" — jobs that disturb between one and five acres of soil.

The scope of the new regulation is actually wider than it sounds. That's because the one-acre threshold includes not just the job you may be working on, but also any adjacent sites that are part of the same "com-

mon plan of development or sale." For example, if you grade a quarter-acre lot in a subdivision where the area disturbed over the course of many years will add up to more than one acre, you have to pull a permit. If your subs control the work at some point, they might have to pull one, also — and all of you may share the responsibility to carry out the Storm Water Pollution Prevention Plan, or

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OFFCUTS**The governments of Dallas and Fort Worth are pressing their legislators to allow the cities to regulate where modular housing can be located.**

Cities can already restrict HUD-code “trailer home” siting through zoning, but factory-built houses that conform to regular building codes are currently treated equally with stick-built housing.

The Newark Star-Ledger says New Jersey governor James McGreevey has asked lawmakers to give towns the right to levy impact fees. Under the proposal, towns would also be allowed to require “transfer of development rights,” a scheme under which fees paid by builders and developers would go to reimburse farmers who agreed not to develop their land. The bargain could let towns shape future development into planned zones of housing and open space.

A top Florida insurer has stopped issuing new workers’ comp policies and is not renewing policies that expire, according to the *Miami Herald*. The Hartford made the move days after a 21% rate hike was rejected by state regulators. Builders dropped by The Hartford will be forced into the state’s assigned-risk pool, which could triple their comp cost.

New tax laws are turning some people into “serial home buyers,” according to the *New York Times*. Changes in the IRS code that made capital gains on sale of a primary residence tax-free after two years in the home have motivated some homeowners in rising markets to change houses frequently as a way to accumulate cash.

EPA Stormwater Rules

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SWPPP (pronounced “swip”).

Most jobs don’t need an individual permit. They’ll fall under the EPA’s Construction General Permit (CGP), which lays out a menu of erosion control methods called Best Management Practices, or BMPs. The builder just has to create a written plan, with a site drawing and a description of the control methods he intends to use. Then he mails a Notice of Intent (NOI) to the EPA. Two days after mailing the notice, he’s automatically covered under the general permit. The permit holder is expected to post his plan at the job site, apply and maintain the control measures, inspect routinely, and adjust the plan as needed.

Ready, set, hold it. There’s just one problem: At the moment, there isn’t any Construction General Permit. The CGP that the EPA issued five years ago expired on February 17, and as of March 7 the agency didn’t expect to have a new one ready before late spring. A policy memo to EPA regional administrators from assistant administrator John Suarez noted, “This lack of a new permit will leave all construction sites from one to five acres without the ability to gain coverage under a permit for those States where EPA is the permitting authority.”

Suarez goes on to say, “The EPA has decided to make enforcement for lack of permit coverage a low priority because a new Construction General Permit has not been promulgated.” But according to the memo, EPA still expects builders to use the Best Management Practices and will still take action if it sees pollution happening.

As of now, EPA has direct responsibility only for Alaska, Arizona, the District of Columbia, Idaho, Massachusetts, Maine, New Hampshire, New Mexico, and Puerto Rico. All the other states have authority to administer NPDES themselves. But according to Marilyn Parson, an environmental analyst with the National Association of Home Builders (NAHB), 21 of these 43 “delegated” states still don’t have their general permits in place, either — which could leave builders vulnerable to third-party lawsuits that the Clean Water Act allows any citizen to file.

In Washington State, even the Phase I rules are in limbo. To settle an environmental lawsuit, the state has agreed to rewrite its general permit — a job that will take at least until summer. And state official Jeff Killelea says Washington is not sure what to expect as the program expands to cover small sites.

“The number of people who need a permit is going to go up dramatically,” says Killelea. “One real estate group said it might double or triple, but that is just speculation. It’s a big unknown.” But it’s clear that state officials already have their hands full: Some state inspectors currently have a caseload of 200 work sites apiece, says Killelea.

In practice, erosion control requirements are nothing new, notes Parsons. “There are lots of local regulations already in place to control sediment and stormwater runoff from sites even smaller than one acre. Builders have been doing that for years. It’s the paperwork that we think is onerous: A federal stormwater plan is a very extensive document.”

Testing Septic Alternatives

Where conventional septic tanks and leach fields fall short, new technology can sometimes do the trick. Sand filters, biofilters, and other active systems can produce effluent as clean as a modern sewage treatment facility can and may overcome problems like unsuitable soil, a high water table, or limited land area for leach fields.

But local authorities are reluctant to permit innovative systems if they can't be sure how the new methods will perform. Scientists at the Massachusetts Alternative Septic System Test Center (www.buzzardsbay.org) in Buzzards Bay, Mass., are trying to provide answers. They've set up conventional and alternative systems side by side to assess their performance under real-world conditions. So far, their data shows that biofilters and sand filters can outperform conventional systems — at least in Massachusetts soils and climates.

"There are several reasons people go for alternatives," says Joe Costa, the test center's director. "It could be to upgrade an existing system to modern standards, or to expand an existing system when space is limited. Or, if it is hard to get the 4-foot separation from groundwater, a sand filter or biofilter could be an alternative to a mound. Then there's removal of nitrogen or phosphorous near a sensitive body of water, which these systems do more effectively."

Beyond the test data, Costa says, local officials often want to see the systems demonstrated in their area, where soils or climate may be different. And he notes that the need for monitoring and maintenance may be a drawback. For new developments, he says, officials often prefer a small collection system with a centralized filter, pump, and disposal field. But, depending on conditions, that could still cost less than new sewers.



Buzzards Bay scientists are monitoring data from biofilter systems (top) and conventional septic systems (above) to verify performance claims.

OFFCUTS

New Mexico lawmakers are considering a bill to take away zoning powers from Albuquerque, Las Cruces, and Santa Fe for the five-mile belts that surround the three cities, according to a report in the *Albuquerque Journal*. The cities now share zoning authority with county governments, but the bill would give full control over "extraterritorial" areas to the counties of Santa Fe, Bernalillo, and Doña Ana.

Wood I-joist market share may be peaking, said a report in the March 7 *Random Lengths* newsletter. I-joist production grew in 2002 at 6.0%, less than the 6.8% increase in single-family home starts. The engineered members seem to have barely maintained their current 41% share of wood floor decks built. Wood I-joist producers are operating at just 68% of capacity, creating pressure for lower prices.

A construction defects bill in the Colorado legislature is creating sharp controversy, according to press reports. A provision that requires homeowners to give builders a chance to remedy problems has been accepted, but lawmakers are struggling to find a workable compromise concerning provisions to cap punitive damages and limit attorney fees.

The Atlanta Home Builders Association is suing the city over slow permit service, according to a report in the *Atlanta Business Chronicle*. The Association says that Atlanta has collected permit fees without providing permits within a reasonable time and is asking the court to force the city to refund any money it has not spent providing permitting services.

Tearing Down a Half Million Barracks, Army Looks to Salvage Wood

Between 1938 and 1944, the U.S. Army built close to 500,000 “temporary” wooden barracks to house the millions of men who were mobilized to fight World War II. Fifty years later, most of those “T buildings” are still standing on army posts around the country, where they take up valuable space and create a maintenance headache. The army would like to get rid of them.

But that’s easier said than done. So far, the approach has been demolition and landfilling. But on some bases, that’s taking up 80% of the landfill space, according to a Corps of Engineers report — and it creates a pollution problem. Most of the wood is coated with layer upon layer of lead-based paint, which makes it illegal to landfill in some states. In California, the army had to pay \$12 million to remove shredded wood from a civilian landfill after a low-bid contractor dumped it there in violation of state environmental laws.

In any case, dumping this wood is a huge waste of high-quality lumber, says John Stevens of the Monterey, Calif., firm Wood Waste Diversion. Stevens is working with Fort Ord, Calif., officials and Corps researchers to find ways to clean up the wood and market it for reuse. Working with Auburn Machinery of Auburn, Maine (800/888-4244, www.auburnmachinery.com) and a team from the army’s Construction Engineering Research Laboratory (www.cecer.army.mil), Stevens has developed a trailer-mounted machine that planes lead-coated wood down to clean lumber at a rate of 3,500 feet per hour. This year, CERL presented a Team Award to a group that included Stevens along with Corps researchers, other industry partners, and representatives from the



AmeriCorps and Habitat volunteers helped the Corps of Engineers take apart “temporary” World War II buildings in a pilot study of deconstruction methods.



Tom Napier, U.S. Army ERDC

Developed by California firm Wood Waste Diversion in cooperation with Army Corps researchers, this mobile wood-recovery unit can strip lead paint from 3,500 feet of lumber per hour. Planed clean, siding from a half million old barracks could supply millions of feet of clear lumber (inset).

Austin, Texas, Habitat for Humanity chapter and the AmeriCorps volunteer program who have helped develop deconstruction techniques at army facilities.

“Most of the painted wood is tongue-and-groove siding,” says Stevens. “Some of it is 1x6 and some is 1x8, but it’s all the same profile across the country — what they called ‘Profile 106.’ It’s a Boston drop siding with a scalloped edge at the top, and a groove at the bottom.” Stevens’ machine trims the pieces to a heavy 5/8-inch thickness, square on four sides, and clean.

“Fort Ord has Douglas fir,” says Stevens. “Fort Chaffee, Arkansas, has southern yellow pine — some of that is gorgeous. All the siding is clear, and about a quarter of it is vertical grain. It all depends on what wood comes at us, but there are markets for all this stuff. Flooring and bead-board are two of the big products, but we have to make sure the quantity is available for the big buyers like Home Depot. They don’t want a one-shot deal of 100,000 feet — they want 100,000 feet every month. And we’re not there yet, but we’re getting there.”

OFFCUTS

Developers in Arizona are upset about a federal plan to set aside 1.2 million acres as critical habitat for the cactus ferruginous pygmy owl, reports the Associated Press. The Fish and Wildlife Service has listed the owl as an endangered species. Developers say the restrictions would cover two-thirds of the private land in the Tucson area, and they question whether the owl is really endangered. There are only 18 of the birds in Arizona, but developers say the animal lives in greater numbers in Mexico and Texas. A federal judge ruled against opponents of the listing in district court; a ruling on an appeal is expected this summer.

Fort Wayne's 2003 Parade of Homes has been cancelled this year after only one builder signed up to build a house for the event, according to the *Fort Wayne News-Sentinel*. HBA director Maurine Holle told the paper that builders were being more conservative because of the economic climate and noted that while homes in the event provide good exposure for builders, there is a risk a home will go unsold and represent a major expense.

New Incentives Spark Solar Electric Resurgence

The photovoltaic industry took a dive when energy tax credits were revoked after the Carter administration left office in 1980. But in the wake of electric utility deregulation, incentives are back in a new form. In many instances, small surcharges applied to electric bills are providing enough money to fund significant support for investments in small-scale solar power. Coupled with advances in technology, "buy backs" and other support measures are creating something of a comeback for solar panels on buildings.

Silicon Valley solar panel supplier Akeena Solar, Inc. (www.akeena.net) provides information on the company's website about solar incentives and subsidies in California, Florida, Massachusetts, New Jersey, New York, Pennsylvania, and Rhode Island. "Those are the states where we think the



Buy-back incentives and tax breaks cut the cost of this 5.7-kilowatt solar roof by half. Where power is costly, solar panel investments can bring positive cash flow and quick paybacks, says Barry Cinnamon of Akeena Solar, Inc.

incentives are high enough to really make it financially attractive, along with the decent solar exposure and high electric rates," explained Akeena marketing director Wahila Minshall. But many other states are now providing incentives; a complete list is posted at www.dsireusa.org, the website of the Database of State Incentives for Renewable Energy.

Rhode Island contractor Bob Chew recently started a solar-panel spinoff to his remodeling business. The new company, SolarWrights (www.solarwrights.com), installs panels supplied by Schott Power (www.us.schott.com). "We start at one kilowatt — using four 6-foot by 4-foot modules," says Chew. "That's enough to power 10 hundred-watt bulbs — maybe 10 to 30 percent of a home's annual needs." Chew says the buy-back rebates plus other state incentives drop the cost of that basic installation from \$15,000 down to more like \$6,000 — and then the power is free. "On sunny days the meter spins backwards," says Chew. ☀