

Burning News *for* Builders

Burning Construction Debris is a Serious Health and Environmental Hazard

Open burning of construction and demolition materials spews pollutants into the air that affect our health and our environment. These pollutants settle in our lakes, streams, soil and feed crops where they enter our food chain by lodging in animal fat and dairy products. So, if you are practicing open burning, which is burning any material outdoors without air pollution controls in place, you are affecting the health of a wide population. Smoke from wood and trash contains very small particles that, when inhaled, lodge deep inside the lungs. These small particles can cause severe health problems including cancer, reproductive disorders, skin diseases, heart disease, liver damage, respiratory and other problems. Children are particularly at risk.

Did you know open burning of building materials is usually illegal?

In Wisconsin, burning of solid waste materials such as treated wood, plastic, and most other materials is illegal [Administrative Code NR 429]. Many communities have local ordinances about open burning that are even stricter than statewide requirements.

Which building materials create toxic smoke?

- | | |
|------------------------------------|-----------------------------------------------------|
| ✓ Plastics | ✓ Glues in particleboard |
| ✓ PVC siding, flooring, piping | ✓ Petroleum products |
| ✓ Foam insulation | ✓ Asphalt shingles |
| ✓ Plastic wraps | ✓ Asbestos containing materials (like old shingles) |
| ✓ Green, CCA pressure-treated wood | ✓ Solvents |



BUILDERS, Don't Get Burned

- Debris burning is the number one cause of forest fires in Wisconsin.
- Burning affects our health & our children's health.
- Burning harms our environment.
- Open burning is usually illegal.

Torching Your Health



Open burning creates dioxin – one of humankind's most toxic chemicals – the same harmful chemical contained in Agent Orange. Dioxin contamination lasts for years in our environment. It accumulates in our fat cells where it can build up to toxic levels.

A recent study found that residential trash burning from a single home could release more dioxin into the air than an industrial incinerator with thousands of customers. Imagine what would result from burning a pile of construction materials!

BUILDERS WHO CARE DON'T POLLUTE THE AIR

The open burning of materials such as carpeting, asphalt shingles and tar paper, electrical wiring and appliances, plastic pipes, drywall and paint is illegal and emits hazardous air pollutants and odors as well.

What alternatives are available to dispose of construction scrap?

There are reasonable alternatives to burning: recycling and landfilling. Reusing and recycling can help you to reduce waste, save money on disposal costs and comply with state and local laws.

Ask for local disposal information when you pick up your building permit.

1. Reuse and recycle what you can.

- ✓ *Corrugated cardboard and containers* – all Wisconsin communities have recycling programs for these.
- ✓ *Clean wood and drywall scrap* – look for local options for recycling. Some landscaping companies and farmers grind these materials to use as mulch or animal bedding. Gypsum drywall can also be used as fertilizer.
- ✓ *Demolition materials* – from remodeling projects can often be reused if removed with that end in mind. Items like doors, windows, electrical fixtures, joists, cabinets, wood floors and paneling are among salvageable items.
- ✓ *Pallets* – pallet remanufacturing businesses that reuse or recycle pallets exist throughout Wisconsin. Check yellow pages.
- ✓ *Thermostats and fluorescent ballasts containing mercury, solvents, paint thinners and other hazardous wastes* – contact your county solid waste department about local or regional clean sweep programs.



Valuable lumber being salvaged for reuse.

Wisconsin's Recycling Law

Corrugated cardboard and plastic, glass and metal beverage containers have been banned from Wisconsin landfills since 1995 [WI Act 335]. Communities & haulers statewide have recycling programs and established markets for these materials.

2. Dispose of the rest at a Construction & Demolition (C&D) landfill, transfer station or local landfill.

- ✓ Landfill CCA pressure-treated wood (it contains arsenic & chromium). As more pressure treated wood decks, stairs and railings are torn down, there is a high likelihood that this wood laden with toxics will be in your C&D debris. Separate it from other materials as you deconstruct because aged treated wood is indistinguishable from untreated wood. Burning or land-applying (shredded) CCA-treated wood is extremely hazardous.



Doors, frames and other building salvage goods.

How will this improve my business and the bottom line?

A builder who takes steps to safeguard people's health & environment can gain clients and marketing advantage while being an asset to the community. People are concerned about their health these days as more people develop allergies, asthma and chemical sensitivity from the hundreds of synthetic building materials, glues, adhesives and other products they're exposed to. More than 30% of the buildings in the U.S. have "sick building syndrome" due to these building materials, according to the U.S. Environmental Protection Agency. People are asking for healthy home and work spaces.

Guidelines for "green" building

Green building is an approach to any building project, whether remodeling or building new, that provides options for builders and contractors to reduce toxic materials and waste and improve energy and water efficiency and occupant health. Wisconsin's Green Built Home Program provides a free guideline of how to build green that any builder can follow

(www.wi-ei.org – click on Green Built Home or call 608-280-0360). A commercial green building guideline called LEED™ is also available through the U.S. Green Building Council (www.usgbc.org). Information about green building, construction site recycling and nontoxic, reused and recycled content building materials is available through UW-Extension (see Related Resources on the next page).



Wisconsin communities are awarding builders who build "green."

Build Smart

Green building is an approach that creates high-performance quality buildings that are good for our health, the environment and the bottom line.

Green building includes:

- Sustainable site planning
- Safeguarding water & water efficiency
- Energy efficiency
- Conserving materials & resources
- Healthy indoor air quality

The Ultimate Recycling!

There are many ways to reuse and recycle building materials from a construction site. Beyond remodeling or rehabbing a building, the ultimate reuse practice is to move the entire structure. The builder moved this home in order to site a small commercial building.



Who to contact?

- Community or county recycling manager
- Local garbage hauler
- UW-Extension County office
- DNR website for more information about open burning
www.dnr.state.wi.us/org/caer/ce/ob/index.htm
or call your local DNR service center, or DNR Air Management (608) 266-7718
- Division of Public Health, WI Dept of Health & Family Services, for health-related questions, (608) 266-5817
www.dhfs.state.wi.us (under human health hazards)
- UW-Extension Center for Environment & Energy (SHWEC) for green building information including C&D recycling help, (608) 262-0385
www1.uwex.edu/ces/cee
- WasteCap Wisconsin, for waste reduction & recycling assistance, (414) 961-1100
www.wastecapwi.org
- Wisconsin Green Building Alliance, (414) 224-9422
www.wgba.org
- National Association of Home Builders (NAHB), (800) 638-8556
www.nahbrc.com (click on green building)

Related Resources

To obtain publications listed below, call CEE at (608) 262-0385. Print publications are also available on the web in pdf format at www1.uwex.edu/ces/cee

Construction Resources: A Waste Reduction & Recycling Guide for Wisconsin Builders & Contractors, UW-Extension Waste Education Series, pub no. 605.SG.9711

Reduce, Reuse, Recycle on Site, 15 minute video, UW-Extension/Engineering Professional Development Construction Waste Reduction & Recycling: Economical Options Series

Building Green for the Future Guide to Materials & Supplies, UW-Extension Waste Education Series, pub no. 615.SG.0204

Great Lakes Trash & Open Burning Web Site

www.openburning.org

(located on the website of the Canadian Centre for Pollution Prevention)



Center for Environment and Energy

(608) 262-0385

www1.uwex.edu/ces/cee

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July 2002

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Graphics design by Jeff Strobel and editorial assistance by Christine Javid, UW-Extension Environmental Resources Center



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