

IEQ NEWS



We care about indoor air

Spring 2008

Indoor Environmental Quality

Issue #7

In this Issue:

- Is it really “green”?
- Reinventing Green
- Green Chemistry
- Legislation
- Building Green
- Green Screen for Safer Chemicals
- Tools for Schools
- Literature review

What's New?

April 28 is National Healthy Schools Day.

Go to <http://www.nationalhealthyschoolsday.org/> for information about planning an event to celebrate healthy school facilities.

In the News

Connecticut schools could get funding for energy-efficient upgrades from the federal Dept. of Energy.

<http://courtney.house.gov/News/DocumentSingle.aspx?DocumentID=84129>

Environmental and Occupational Health Assessment Program

Indoor Environmental Quality Unit

Marian Heyman Joan Simpson
Brian Toal Kenny Foscue

Phone: 860-509-7740

Fax: 860-509-7785

Email: joan.simpson@ct.gov

J. Robert Galvin, MD, MPH, MBA
Commissioner

[Http://www.ct.gov/dph](http://www.ct.gov/dph)



FOCUS: Going Green

Is it really “green”?

“Green” or “environmentally preferable products” (EPP) are products that have a reduced effect on human health and the environment when compared to other products that serve the same purpose. The term “green” and the characteristics that have come to define it are currently not regulated.

There are a number of non-profit, third-party certification organizations that evaluate products using established science-based criteria to develop standards. Several are listed in the box to the right. ➡

Some products are now being marketed as “green” that may not be any better for the environment than regular products. This is called “greenwashing.” Check for the certification logo.

“Reinventing Green”

Green Chemistry is a new way of thinking that focuses on environmental impacts at the earliest stages of innovation and invention. It utilizes 12 principles that aim to reduce or eliminate the use or generation of hazardous substances in the design, manufacturing and application of chemical products. The principles include:

- Design chemical products to be fully effective, yet have little or no toxicity,
- Design chemicals and products to degrade after use,
- Minimize the potential for chemical accidents.

Source: Green Chemistry, Theory and Practice: P. Anastas and J. Warner, 1998.



Green Seal—certifies a wide variety of consumer products. <http://www.greenseal.org>



Green Guard Environmental Institute—certifies non-consumable products (furniture). <http://www.greenguard.org>



EcoLogo—Canada’s Certification program. <http://www.ecologo.org>



Green Label—The Carpet & Rug Institute’s effective carpet cleaning solutions & equipment. <http://www.carpet-rug.org>

LEGISLATION

Current state law: Public Act No. 07-100 AN ACT CONCERNING THE USE OF CLEANING PRODUCTS IN STATE BUILDINGS. 10/07 Only certified EPP cleaning products that are labeled *Green Seal Certified* shall be used in state owned and leased facilities.

[Http://www.das.state.ct.us/busopp.asp](http://www.das.state.ct.us/busopp.asp)

Proposed: House Bill 5464 AN ACT CONCERNING INCENTIVES FOR SCHOOLS AND MUNICIPAL BUILDINGS TO USE ENVIRONMENTALLY FRIENDLY CLEANING SUPPLIES.

[Http://www.cga.state.ct.us](http://www.cga.state.ct.us)



Technically Speaking: Building Green



There are a number of ways to incorporate green building strategies into both residential and commercial building projects. These strategies may be incorporated into new buildings at any stage, from the initial design through renovation/demolition. Green strategies may be reflected in the size of the building, how and where the structure is to be sited, as well as in choices of building systems (mechanical, electrical & plumbing), and construction materials, contents (furnishings and appliances), and maintenance products. Things to consider include using a mix of reclaimed plus new materials for the project, and the impact on the earth's resources of both manufacturing and transporting goods to the jobsite.

While energy and water conservation are foremost in the minds of many people, it is also important to consider indoor air quality. Choose materials that minimize off-gassing in occupied areas. Follow the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) Standard 62 to maintain adequate ventilation to support the population in the building. Build using moisture resistant construction techniques to minimize dampness that could attract indoor mold growth.



There are several organizations that offer design/build performance criteria towards attaining various levels of green building certification. The most frequently cited programs in this country are the US Green Building Council's LEED® Certification - <http://www.usgbc.org> - and the Green Building Initiative's *Green Globes* environmental assessment and rating systems - <http://www.thegbi.org/home.asp>

Other resources:

- Connecticut Fund for the Environment <http://www.cfenv.org>
- EPA's *A Guide to Residential Green Building in New England*: <http://www.epa.gov/region1/greenbuildings/residential/pdfs/guide07.pdf>

Green Screen for Safer Chemicals is a new comparative assessment tool for evaluating chemicals. It was developed by Clean Production Action, a nonprofit organization that promotes the use of products that are safer and cleaner across their life cycle. The tool is a guide that will help companies make informed decisions about chemicals, which will lead to greener chemicals in the marketplace. It builds on the principles of green chemistry and defines benchmarks including hazard criteria, levels of concern, and threshold values. <http://www.cleanproduction.org/publications.php>



Tools for Schools: Green Schools

As CT state buildings move to implement state-mandated green cleaning protocols, more school districts are following suit. Why? Green cleaning protects the health of students and staff, particularly custodians, increases the lifespan of school facilities and protects our environment. According to the Healthy Schools Campaign, there is a five-step process to implement a green cleaning program:

- Switch to green cleaning products. This step includes providing training to personnel.
- Introduce green equipment and supplies (improved vacuum cleaners, filters, microfiber cleaning systems, etc)
- Adopt green cleaning procedures. This may involve changes in cleaning frequency, techniques or schedule changes.
- Use green paper and plastic products. This includes taking steps to reduce consumption.
- Share the responsibility. Educate and involve custodial staff, teachers, students and others about their role.

Tools for Schools teams can take a lead role in assisting their district to implement green cleaning. For more information and copies of *The Quick & Easy Guide to Green Cleaning in Schools*: <http://www.greencleanschools.org>



Literature Review

Greener Cleaners: Consumer demand for environmentally friendly cleaning products has changed the game for chemical suppliers. Chemical & Engineering News, January 21, 2008, vol 86, Number 3, pp.15-23.

This article discusses how chemical companies are formulating new products and ingredients in response to demand from manufacturers, marketers, retailers, and consumers. Companies are beginning to consider the total carbon footprint inherent in the manufacturing process, packaging, consumer use and disposal of their products.

<http://pubs.acs.org/cen/coverstory/86/8603cover.html>

Helpful Web Links



<http://www.thegreenguide.com>: The Green Guide, run by National Geographic, provides green consumer information.

<http://www.informinc.org/cleanforhealth.php>: *Cleaning for Health: Products and Practices for a Safer Indoor Environment.*

<http://www.ct.gov/das>: EPP products for state contractors.

<http://www.epa.gov/epp>: Environmental Protection Agency, Environmentally Preferable Purchasing

<http://householdproducts.nlm.nih.gov>: National Institutes of Health green products database.