

VOLUME 5, ISSUE 2

POLLUTION PREVENTION VIEW A Newsletter from the Connecticut Department of Environmental Protection

SPRING 2005

A New Prescription For Hospital Cleaning

Cleaning a hospital is not like cleaning your home or office. There are patient areas that must be sanitized with germicidal cleaners and non-patient areas where other types of cleaners are used. Why would a hospital consider using environmentally preferable and bio-based products, sometimes referred to as "green" cleaning products, when the old tried and true products work just fine?

Using toxic cleaning products not only has serious health consequences for janitorial staff but also can be a source of complaints from nurses and other hospital employees who are exposed to them every day. Patients, with their health already compromised, may also be particularly sensitive to the chemicals used for cleaning their rooms. These negative impacts are counter to a hospital's main mission -- to promote, restore and maintain the health of all the people they serve, including employees as well as patients and visitors. Greenwich Hospital, concerned about employee safety, compiled an exhaustive inventory of cleaning products used at their facility. As a result, the hospital found that they could replace 62 products with only 10 green cleaners and 7 germicides. In addition to reducing the negative health impacts, Greenwich Hospital found that switching to "green" resulted in cost savings and more efficiency.



Recently, some Connecticut hospitals learned more about the green cleaners at a workshop held on March 30 at the Hospital of St. Raphael in New Haven. The workshop was co-sponsored by the **CT Hospital Environmental Roundtable (CHER)**. CHER is a collaboration of the DEP, Hartford Hospital and Hospitals

(continued pg. 2)

What's Inside . . .

A New Prescription For Hospital Cleaning	2
Plug Into Clean Energy	3
Developing The State Solid Waste Management Plan	3
Recycling Round-up	4
Composting Has A-Peel	4
New Guidance on Renovation and Demolition Requirements	4
Envelopes With A Checkered Past	5
What's New In P2? — from the Connecticut DEP	5
When It Rains, It Absorbs	6
Ask Eartha	7
• P2 Calendar	8

A New Prescription For Hospital Cleaning

(continued from pg. 1)

for a Healthy Environment (H2E) and is open to any Connecticut health care facility.

The focus was on environmentally preferable products (EPP) and bio-based products that can be used by hospitals for cleaning and food service (see below for definition). The purpose of the workshop was to make hospitals aware of health and environmental effects of toxic cleaning products and to have them learn more about "green" alternatives and how to switch to these products at their hospitals.

The world of EPP and bio-based cleaners is new territory for most hospitals in the state. **There are only three Connecticut hospitals currently using less toxic cleaning products -- William Backus Hospital in Norwich, Greenwich Hospital and Danbury Hospital**. At the March 30th workshop, experts from INFORM and the Toxics Use Reduction Institute (TURI) presented technical information on this topic and Environmental Services Directors from the North Bronx Health Network and William Backus Hospital presented their practical, "real world" experience implementing and using these types of products. Vendors were also available to answer questions and distribute samples of their products. Workshop attendees even had refreshments on plates made from sugarcane, grass and reed plasma. (See below for more information.)

As a result of the workshop, hospital representatives learned that **using environmentally preferable** and bio-based products can improve employee health and patient and visitor comfort, and can significantly cut operating costs. By being good environmental stewards, hospitals make a strong statement about their commitment to the health of all the people they serve.

Environmentally Preferable and Bio-based Products

An Environmentally Preferable Product (EPP) has a lesser or reduced effect on human health and the environment when compared with competing products used for the same purpose. These products also take into consideration recycled content, waste minimization, water and energy conservation, and the amount of toxics disposed or consumed.

A bio-based product relies on plant or animal materials as the main ingredient. The materials used to produce the products are from renewable resources and generally do not contain synthetics, toxins or environmentally damaging substances.

Some EPP and bio-based products are **Green Seal** certified. Green Seal is a

non-profit organization that identifies and certifies products and services that "cause less toxic pollution and waste, conserve resources and habitats, and minimize global warming and ozone depletion" and perform well. To earn the Green Seal, an industrial and institutional cleaner must meet the following standards:

- Do not contain carcinogens, reproductive toxins, skin and eye irritants, skin sensitizers;
- Are not combustible;
- Do not contribute to photochemical smog, tropospheric ozone production or poor indoor air quality;
- Are not toxic to aquatic life; and
- Can be readily biodegradable.

For more information on the CT Hospital Environmental Roundtable (CHER) and presentations from a recent meeting on green cleaning, visit the DEP website www.dep.state.ct.us/wst/p2/ institutions/healthcare.htm.

Other Resources:

www.gghc.org

Green Seal -WWW.greenseal.org Hospitals For a Healthy Environment (H2E) -WWW.h2e-online.org INFORM -WWW.informinc.org Toxics Use Reduction Institute (TURI) -WWW.turi.org Bio-based Manufacturer's Association -WWW.biobased.com Green Guide for Health Care -

Plug Into Clean Energy

Did you know that as of April 1, you can buy clean energy for your home and business? Every customer of Connecticut Light & Power and United Illuminating can sign up for either 100% or 50% clean energy.

In Connecticut, clean energy is defined as energy from wind, solar, small-scale hydro, landfill gas, fuel cells, ocean thermal or waves/tides, and small-scale sustainably harvested biomass. Biomass includes a wide variety of renewable materials, including wood, agricultural crops, and animal manures. The clean energy product offered by one clean energy supplier, Sterling Planet, includes the following energy mix: 33% from wind, 33% from small hydroelectric generation, and 34% from landfill gas generation. The other clean energy supplier, Community Energy, draws 60% of their power from wind and 40% from landfill gas generation.

If you choose to purchase clean energy, the cost depends on which supplier you choose and how much electricity you use in a month. Check your electric bills to find out your usage in kilowatt-hours (kWh); keep in mind your usage varies throughout the year. An average household (using 500 kWh per month) that purchases a 100% clean energy product will see an increase of around \$6 a month for their electricity; the 50% option will be around a \$3 increase. Your regular monthly utility bills will include the cost of your clean energy purchase.

The clean energy market in Connecticut has grown in recent years with the restructuring of the electric market, the legislative requirement for growing percentages of clean energy in our supply mix, and increasing awareness that clean energy is available and as dependable and strong as conventional sources of energy. Clean energy has many environmental and societal benefits, including cleaner air (reduced emissions of greenhouse gases, SO_2 , NO_x , mercury) and healthier communities (lower asthma rates and respiratory **disease)**. These qualities are especially important to the people, flora, and fauna of Connecticut's communities.

Interested in learning more?

Visit www.GoCleanEnergy.com or contact Smart Power at (860) 874-9897.





Developing the State Solid Waste Management Plan

DEP has begun the task of developing an updated State Solid Waste Management Plan. The Plan will address the management of all solid waste generated in Connecticut. The public will have opportunities for participation throughout the planning process. Early on, DEP intends to hold a one-day public stakeholder forum that will present the status of the State's recycling and solid waste management activities and gaps between current solid waste generation rates and goals. DEP will be inviting the public and other stakeholders to the forum that is tentatively scheduled for early June 2005. Please check the DEP website concerning the stakeholder forum www.dep.state.ct.us for more information as it becomes available.



Recycling RCJundup

Composting Has A-Peel!

Spring has sprung and along with it comes mouthwatering thoughts of plump, juicy garden tomatoes, crisp bib lettuce and visions of colorful flowers and bright green lawns. So why not feed your soil the organic way and help the environment by giving composting a try?

It's easy. No matter what your resources or level of gardening experience, you can make great compost. Compost is a a soil-like product created when naturally occurring microorganisms, bacteria and insects break down organic materials such as leaves, grass clippings and kitchen scraps.

Sometimes, a person's resistance to composting is created by a misunderstanding about how the compost process happens and a fear of trying something new. If composting is done following some basic guidelines, the concerns people have will be unfounded. So, let's dispel some of the fears and address the more common roadblocks to composting.

Odor, that's a biggie. Rotting food by itself will smell, but when buried in the compost pile under 8 inches of decomposing leaves, **the compost process destroys foul odors**. And what about critters? If the compost pile doesn't smell, it won't attract animals. Keeping the food scraps well incorporated, and being sure not to add meat, fat or dairy products will eliminate odor and deter animal guests.

The amount of time and effort it takes to compost is minimal. Once your bin is set up, it only takes a few seconds to divert your kitchen scraps to a collection container, and a few minutes every couple of days to bury the scraps in your bin. You can have compost available to use in as little as three months. Sure, it's a little more work than throwing your food waste in the garbage can, but isn't the payoff worth it? Compost is known as gardener's gold. By mixing it into soil, it provides nutrients and improves the general health of soil allowing you to spend less money on fertilizers and disease control. You are also benefiting the environment by keeping waste out of our landfills and incinerators. Even if you are not a gardener, you can use your compost as mulch or to improve your lawn.

Getting set-up for composting doesn't have to be expensive. **The total cost could be close to zero** if you build your bin using discarded pallets, fencing, or cement blocks. Sometimes towns will subsidize the cost of ready-made bins through a truckload sale, so check with your town's public works department. Ready-made bins can also be found in a variety of price ranges at garden centers and on-line.

Ready to get started? For more guidance, visit DEP's website at http://www.dep.state.ct.us/wst/compost/hcompost.htm or call (860) 424-3365 for a free brochure on home composting.

New Guidance On Renovation And Demolition Requirements

DEP, along with several other state and federal agencies, non-profit organizations, and private-sector professionals, has put together a guide that summarizes the various environmental, health, and safety requirements that apply to renovation and demolition. This guide, Renovation and Demolition: Environmental, Health, and Safety Requirements You Should Know About, briefly describes each requirement, provides telephone numbers of the agencies involved with each requirement, and lists web site addresses for additional information. Copies are available by calling DEP's toll-free hazardous waste compliance assistance line (1-888-424-4193).

DEP has also developed the *Red Flag List*, a companion to the above guide. This list was specifically designed for local officials who may be out at renovation and demolition sites. It lists several significant violations of environmental, health, and safety requirements that local officials may observe in the field, and indicates the state or federal agencies to which they should report these violations. Copies are also available by calling DEP at the telephone number listed above.



P2VIEW | SPRING 2005

Envelopes with a Checkered Past

(or maybe flowery . . .)

Sydney Evans was surprised when he picked up a picture of a winter scene on his friend's desk and discovered it was an envelope. His friend revealed that she had made the envelope from an old magazine picture. Fascinated by the idea, Evans and his wife made over 25,000 envelopes by hand in the next year and a half from scrap materials, such as leftover wallpaper and old calendars, and sold them at craft fairs.

These unique envelopes with their colorful designs caught the eye of many, prompting the Evanses, both in their eighties, to start a company called **Envelopes, Anyone?**. They partnered with the West Haven Community House Program employing 23 physically and/or mentally challenged individuals, including World War II veterans, to help craft the envelopes. To meet the grow-



Talking Trash 2 — Hartford Landfill Forum

ing demand, they are looking for more donations of unwanted wallpaper books or rolls and picture calendars (8" x 10" or larger).

"I haven't met anyone who hasn't liked our envelopes," says Mr. Evans, "They have given disabled individuals the opportunity to work and are made from beautiful materials that would have ended up in the trash." To check out their unique envelopes (they are also reusable), visit their website www.envelopesanyone.com or call (203) 773-9019 for more information.



Business owners, community disculeaders, local and state officials, amore and neighborhood activists gion attended the second in a series innov of forums held in response to the w the upcoming closure of the Hartford Landfill, a regional nersh facility that accepts waste and ash from 69 Connecticut towns. This March 29 forum was a Pollu

chance for the community to

discuss ways to reduce the amount of waste that the region generates and new and innovative methods of treating the waste. The Hartford Neighborhood Environmental Partnership (HNEP) co-sponsored the event. For more information, contact the DEP Office of Pollution Prevention at (860) 424-3297.

When it Rains, It Absorbs

Let nature manage your rainwater by collecting it in a rain garden and allowing the water to slowly percolate back into the ground. You will create a beautiful garden that also helps the environment.

A rain garden is a shallow depression in the soil that has several permeable layers of coarse stone and gravel, under a mix of soil, compost and sand. Plants that thrive in well-drained soil are added and may include native flowers and grasses. The garden is positioned to receive runoff from roofs. sidewalks, and any paved surface. The garden serves as a temporary reservoir for rainwater and its plants benefit as the water slowly flows back into the ground. Rain gardens are a creative way to beautify any area while managing stormwater run-off.

Rain gardens are becoming more common, and there are examples around the state that offer ideas if you are thinking of making one. The University of Connecticut has a rain garden near the Towers Dining Hall that helps reduce stormwater runoff from a parking area. "Rain gardens eliminate standing water, filter runoff pollution, recharge local groundwater, create habitat for birds and butterflies, and most of all, improve water quality," said Richard Miller, UConn's Director of Environmental Policy.

Another rain garden project in Haddam is being piloted by UConn's Nonpoint Education for Municipal Officials (NEMO) program in conjunction with UConn's Department of Natural Resources Management and Engineering. This project involved the creation of a vegetated rain garden to receive runoff from the back half of a large conference room roof. The amount and quality of runoff are being monitored as it enters and flows through the garden.

The Jordan Cove Urban Watershed Project in Waterford is the location of many rain gardens. In this



Rain garden at UCONN

residential housing development, each lot has a rain garden and the entire project is being monitored for the effectiveness of many alternate forms of stormwater management. For more information on this project, visit DEP's website at:

http://www.dep.state.ct.us/wtr/nps/ succstor/jordncve.pdf.

If you are interested in creating your own rain garden, the Brooklyn Botanical Garden offers step by step instructions on their website -

www.bbg.org/gar2/topics/design/ 2004sp_raingardens1.html

WHAT'S NEW?

(continued from pg. 5)

Friday is Bike To Work Day

"Moderate exercise - such as walking and biking - is the number one thing Americans can do to improve their health." - Surgeon General of the United States



For the fifth consecutive year, **"Bike to Work" events are being held on the last Friday of each month from April through October** in the Capitol region. Many employees will leave their cars at home and bicycle to work, experiencing a more enjoyable start to their day, while getting in a healthy cardiovascular workout. Along with health benefits, they also gain from cost savings, pollution reductions, air quality improvements and reduced traffic. A free breakfast at the Old State House in Hartford is offered to all who commute via bicycle on the "Bike to Work" Fridays.

Representatives from several agencies along with dedicated bicyclists are making plans and lining up support for new bike commuters during the upcoming season and throughout the year. Again this year, DEP staff members are volunteering to host the May 27th event in conjunction with "Air Quality Awareness Week" -- pointing out that the single biggest contribution we can make to cleaner air in Connecticut is to avoid driving. Please join DEP Commissioner Gina McCarthy who plans to ride her bike to the event.

For more information, see the web site: www.crcog.org - click on the "Bicycle News" link



Note: This feature offers answers to select environmental questions. Send your question to the editor's address -- judith prill@po state chus and watch future issues for an answer.

Dear Eartha:

What appliance uses the most electricity in my house? I am constantly after my family members to turn off the lights after they leave a room, but is there something else I could be doing that would save a lot of energy?

---Julie V., Andover, CT

Refrigerators are the single biggest energy consumer in most households. Replacing a refrigerator bought in 1990 with a new model (having the ENERGY STAR label) would save enough energy to light the average household for more than four and a half months.

And having an older model second refrigerator or freezer in your basement or garage may be costing you a lot more than you realize.

Besides using more energy, older appliances can contain materials that are harmful to the environment such as chlorofluorocarbons. Connecticut Light and Power (CL &P) and United Illuminating (UI) are making it easy for their customers to get rid of these energy wasters through their Appliance Retirement Program. Customers can have their aging appliances picked up for recycling and receive fifty dollars for a working refrigerator or freezer and

twenty-five dollars for an air conditioner or dehumidifier. For more information or to schedule a pick-up, call toll-free 1-800-664-2722 or visit http:// www.cl-p.com/clmres/energy/ refrigerator.asp for CL&P customers or www.uinet.com/ clm/appPickUp.asp for UI customers.

You can also reduce the amount of energy your refrigerator or freezer uses, whether with a standard or an ENERGY STAR model:

- Position your refrigerator away from a heat source such as an oven, a dishwasher, or direct sunlight from a window.
- To allow air to circulate around the condenser coils, leave a space between the wall or cabinets and the refrigerator or freezer and keep the coils clean.
- Make sure the door seals are airtight. If you easily can pull a dollar bill from the refrigerator door, you are losing cold air. Look into having the door gasket replaced.
- Keep your refrigerator between 35 and 38 degrees Fahrenheit and your freezer at 0 degrees Fahrenheit.
- Minimize the amount of time the refrigerator door is open. (Though this may be as difficult as training your family to turn off the lights!)



Is your refrigerator running?

And remember, **if you are replacing appliances, look for the ENERGY STAR label**. ENERGY STAR appliances will help you save money - \$20 to \$100 per year for every appliance ten years or older that is replaced - as well as conserving energy and protecting the environment.

For more information, go to www.myenergystar.com

Eartha





STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION 79 Elm Street Hartford, CT 06106-5127 www.dep.state.ct.us Gina McCarthy, Commissioner

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P2 View is published by the Connecticut Department of Environmental Protection, Office of Pollution Prevention. Editor: Judy Prill; Contributors: Nan Peckham, Mary Sherwin, Connie Mendolia, Lynn Stoddard, Kim Trella, David Westcott, K.C. Alexander, Judy Belaval, Ross Bunnell, Tess Gutowski

Publication of this newsletter is funded by a grant from the U.S. EPA.

Printed on 100% post-consumer recycled paper using water-based ink.

P 2 C A L E N D A R

A SELECTION OF ENVIRONMENTAL EVEN

April - June 2005 Solar Energy Forums (various towns)

A series of forums around the state are scheduled to provide information on solar energy, including options and incentives for residential solar installations. For more information, visit Solar Connecticut's website at http:// uhaweb.hartford.edu/solarinfo/ news.htm.



P2 Lecture Series

DEP sponsors a lecture series on pollution prevention topics. Lectures are free, open to the public, and are held in the Phoenix Auditorium, DEP Building, 79 Elm St., Hartford. For additional information, contact Lynn Stoddard at (860) 424-3236 or go to www.dep.state.ct.us/calendar/ calendar.htm.

June 9, 2005 9:00 - 10:00 AM The Link Between Ozone and Mortality in Urban Areas; Dr. Michelle Bell, Yale School of Forestry and Environmental Studies

August 16, 2005 Organic Lawn and Turf Course Manchester

The Northeast Organic Farming Association (NOFA) is sponsoring an intensive day-long course for land care professionals and municipal employees on state-of-theart management of lawns and athletic turf. For more information, contact CT NOFA at 203-888-5146 or www.organiclandcare.net.

