### ENERGETICALLY PROTECTING CT'S ENVIRONMENT



79 Elm Street is an Energy Star!

Clean energy is not something we just talk about at the Connecticut Department of Environmental Protection (DEP). On November 2, **DEP** took action to become the first and only state agency to take advantage of the clean energy option now available and is powering the agency with 100% renewable energy. The energy will come from wind, landfill gases and small hydro-electric plants.

DEP's mission is to protect all facets of the environment of the state: we maintain our beautiful state parks, protect our land, water and air and provide education to the public. You may recall from previous P2 View articles that DEP employees recycle and compost at the headquarters on 79 Elm Street in Hartford. And the recent switch to purchasing of clean energy is another example of our agency's effort to practice what we preach.

Our first step was to invest in energy conservation and efficiency. For example, we have made improvements in windows, installed more efficient fluorescent fixtures, occupancy sensor lighting controls and an energy management system. In June 2005, the U.S. Environmental Protection Agency (EPA) honored DEP and the CT Department of Public Works for making these significant improvements in our 75-year old building with an Energy Star Label for superior energy efficiency.

DEP's recent move to purchase "clean" power is helping the State move towards a goal of obtaining 20% of its power from renewable sources by 2010. Although the clean energy option is more expensive now, as more CT businesses and residents sign up, we may see a decrease in that cost over time, but we will reap the environmental benefits of less polluted

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### ENERGETICALLY PROTECTING

CT'S ENVIRONMENT (continued from pg. 1)

air right away. For example, DEP Commissioner Gina McCarthy remarked that by switching to clean power, the DEP will reduce its carbon dioxide emissions by 3,716 tons per year or the equivalent of taking 730 cars off the road. In addition, we are taking one more step to reduce our dependence on fossil fuel.

DEP employees are also taking their commitment to the environment out of the office -- 70 employees so far have signed up to buy clean power for their homes. This represents a savings per household of 11 barrels of oil each year. If you are a customer of CL&P or UI, you can choose to purchase clean energy for your home or

business. To date, about 5,500 customers have chosen this option. Throughout Connecticut, there are now 16 towns that are also committed to buying clean energy and are encouraging their local residents, businesses, and institutions to do so.

For more information on choosing clean energy, visit www.gocleanenergy.com.
You can calculate how clean the electricity that you use is by going to www.epa.gov/cleanenergy/powerprofiler.htm.
To find out more about what CT towns are doing or for general information on climate change, go to www.ctclimatechange.com.

### A Bright Idea

Open a newspaper or turn on the TV, and there's bound to be a news story on the cost of fuel and electricity. One simple thing that all of us can do to conserve energy is to switch to compact fluorescent light bulbs, or CFLs. Just replacing one incandescent light bulb in every U.S. home with an Energy Star CFL can save the nation \$600 million in energy costs. That is enough energy to light 7 million homes and prevent greenhouse gas emissions equivalent to 1 million cars.



Pauline Blackstock of the Department of Environmental Protection (DEP) wanted to make it even easier for her co-workers to switch to CFLs so she helped organize an Energy Star Lighting Sale at the DEP headquarters earlier this year. Several styles of Energy Star CFLs were sold, many for only \$1.00. Torchiere floor lamps and Tiffany and Euro style desks lamps were also sold at prices ranging from \$5.00 - \$20.00. Participation was phenomenal, with employees purchasing a total of 4,191 CFLs, 201 desk lamps and 477 torchieres for use at home. Savings on energy bills from the use of these items for the first year is \$119,000, and over \$1 million during operational lifetime. Another benefit of replacing their lighting is that air pollution will be reduced – resulting in the equivalent of removing 1,425 cars off the road for a year.

The lighting sale is a program of the CT Energy Efficiency Fund and is funded by the Conservation Charge on customer electricity bills. The State Office Building in Hartford and the Department of Social Services also held similar Energy Star Lighting Sales. If you are interested in holding a lighting sale at your workplace, contact Adam at TechniArt, (860) 693-2450.



For more information on CFLs, see the "Ask Eartha" column in the Winter 2004-05 issue of P2 View:

www.dep.state.ct.us/wst/p2/p2View/p2viewwinter04-05.pdf

## Recycling Recycling



### Everything . . . Including the Kitchen Sink: An Update

On October 15, The ReCONNstruction Center, a non-profit building materials re-use store, celebrated its grand opening at 230 South Street in New Britain. The day was a sweet reward for the volunteer members who have been working hard for the past three years to make their vision a reality. Despite the rain, a steady stream of customers purchased everything from windows and doors to hardware and molding. The most commonly heard phrase of the day was "This is such a great idea...I'll be back with my friends".

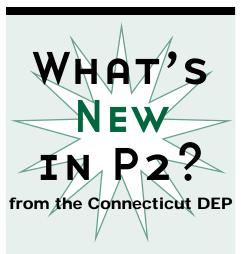
The ReCONNstruction Center functions similarly to a Salvation Army thrift shop, except that instead of accepting clothing and household goods, the Center accepts donations of unwanted, but perfectly usable building materials. These materials are inventoried, priced, and displayed at the store. Each donor receives a receipt with a description of the donated materials that can be used to claim a tax deduction. You too can show your support for the environment by purchasing, donating, or volunteering. Regular store hours are Tuesday and Wednesday 7 a.m. - noon; Thursday & Friday 3 p.m. - 6 p.m.; Saturday 8 a.m. - 3 p.m. Visit the website for more information: http://reconnstructioncenter.org or call them at (860) 597-3309.

### Solid Waste Management Plan Continues To Move Forward

In early November, DEP released a preliminary draft document of certain sections of the proposed State Solid Waste Management Plan. It contained the Vision Statement; Guiding Principles; Goals; and Objectives and Strategies. Among the most significant proposals being made include (1) have reliable, stable sources of funding in place to support programs at the state, regional and municipal levels; (2) aggressively reduce the amount of waste disposed through increased recycling and composting programs; and (3) monitor available disposal capacity to ensure the State's interests are being met and assign high

priority to any applications for new capacity when it is determined to be needed.

The preliminary draft document was discussed at the DEP External Stakeholders Committee meeting in November. Committee members were asked to provide comment to the DEP by the end of December. The committee will meet mid-January to continue discussion. The DEP expects to have a completed draft Plan in March. See DEP's website for the draft document: www.dep.state.ct.us/wst/solidw/swplan/index.htm or contact Tess Gutowski at (860) 424-3096 for more information.



# New Fact Sheets Available on Automobiles and Wood Stoves

Driving a car has a significant impact on the environment, from the resources used to manufacture the vehicle, how we drive and how much, to the final disposal of the vehicle. DEP's new fact sheet "Reducing your Environmental Footprint: Information on Purchasing a Vehicle, Driving, and Maintenance Tips" provides ideas on how you can reduce these impacts --www.dep.state.ct.us/wst/p2/individual/envfootprint.htm

Using a wood stove can significantly contribute to air pollution. The new "Wood Stoves" fact sheet provides tips if you are considering burning wood, including ways to reduce this pollution, such as using a certified stove and burning cleaner and more efficiently:

www.dep.state.ct.us/wst/p2/individual/woodstoves.htm

For more information, contact the DEP Office of Pollution Prevention at (860) 424-3694.

### Get Charged Up about Battery Recycling...

In the U.S., about three billion batteries, or about ten per person, are sold per year and millions more are thrown away. Many batteries contain heavy metals, such as mercury, cadmium and lead, which can be harmful to human health and the environment.

Over the past decade, the battery industry has responded to public concerns and legislation by making changes in battery design and providing recycling options. Since the early 80's, manufacturers have reduced their use of mercury by over 98 percent. More rechargeable batteries are being produced each vear, relative to the number of non-rechargeable batteries. A take-back program for these rechargeables is being sponsored by the battery manufacturers and there are many participating retailers such as The Home Depot, Lowe's, Radio Shack, Sears, Staples, Target and Wal-Mart. You can go to the Rechargeable Battery Recycling Corporation's website at www.RBRC.com to find a collection site nearest you or call the consumer help line at 1-800-8-BATTFRY.

Another option for battery recycling is through INMETCO (The International Metals Reclamation Company, Inc.). Businesses and consumers can mail some types of rechargeable and non-rechargeable batteries to them. You can get more information at (724) 758-2800 or www.inmetco.com/ services\_battery.htm. There are also several companies in CT that will pick up batteries for recycling from businesses and municipalities. For more information, contact Tom Metzner, DEP, at (860) 424-3242 or tom.metzner@po.state.ct.us.

With the many choices available, it can be confusing when choosing or disposing of batteries. (See the table on page 5 for summary of battery disposal options.) From an environmental point of view, using fewer batteries is the **best option**. To get the most life out of your batteries and the gadgets that use them, make sure you follow the manufacturer's instructions. If you use a lot of batteries, you may want to consider investing in a recharger and using nickel metal hydride batteries -- they perform better than the other rechargables and are environmentally preferable to nickel cadmium batteries.

#### **Further Resources:**

Information on managing household batteries:

www.dep.state.ct.us/wst/recycle/batthaz.htm

Summary of the "pluses and minuses" of different types of rechargeables and rechargers:

www.grinningplanet.com/2004/11-23/rechargeable-batteries-battery-charger-article.htm

Information on battery care:

www.energizer.com/learning/batterycare.asp

or www.duracell.com/care\_disposal/care.asp

Information on environmentally-friendly rechargeable batteries:

www.greenbatteries.com/

### Summary of Battery Disposal Options

BATTERY TYPE AND DESCRIPTION		WHERE TYPICALLY USED	RECYCLING OPTIONS			CAN IT
			RBRC	INMETCO	OTHER	GO IN THE TRASH?
*some rechargeable alkaline batteries are available		Radios, tape and CD players, toys, clocks, answering machines, flashlights, etc.	No	Yes		Yes
RECHARGEABLES	Nickel Cadmium (Ni-Cd)  Mandatory recyclable in CT	cordless phones, camcorders, hand- held vacuums, cordless power tools	Yes	Yes	Check with your town's public works department	No
	Small Sealed Lead- Acid	camcorders, cordless phones, power tools	Yes	Yes		Yes
	Lithium ion	cameras, cell phones, lap top computers	Yes	Yes		Yes
	Nickel metal hydride (Ni-MH)	camcorders, power tools, cell phones	Yes	Yes		Yes
BUTTON CELLS (Non-rechargeables)	Lithium	cameras	No	Yes	No	Yes, if fully spent
	Silver oxide	watches	No	Yes	Most jewelry stores	d s waste
	Zinc-air	hearing aids	No	Yes	No No	Bring to a household hazardous waste collection
	Alkaline	small toys & gadgets	No	Yes		

### Connecticut Creative Store Reopens

You can once again shop at the Connecticut Creative Store sponsored by the CT Department of Agriculture. The store has a variety of made-in-Connecticut food products, along with a juried selection of Connecticut crafts and botanical gifts. Newly designed customized baskets will be created along with the popular CT Grown basket. By buying locally grown or produced food, you can help to improve the environment. Because local food has to travel a shorter distance to get to the store, the amount of air pollution from its transport is reduced. Buying local also supports Connecticut's farmers, helping to preserve farmland.

The Connecticut Creative Store will be open Monday through Friday, from 10 a.m. until 2 p.m. In addition, in order to satisfy holiday shopping demand, it will also be open the first three Saturdays in December. Tasting of products will be offered daily. The store's new location is 25 Stonington Street in Hartford (just off Wethersfield Avenue) in a colonial brick building shared with the Hartford Botanical Garden Project. The City of Hartford in conjunction with the Project is planning a historical botanical garden on an 18-acre site of the former Colt Estate, now Colt Park.

For more information, call the Connecticut Creative Store at (860) 297-0112.

### Lighting Up The Sky -A Waste of Resources

There is no light in earth or heaven But the cold light of stars;

- Henry Wadsworth Longfellow

More than one hundred fifty years ago a New England poet could write of the night sky and there was enough darkness to see the "cold light of stars." Then along came large-scale outdoor lighting -- a modern phenomenon that began during a time when energy was inexpensive and seemed endless. This lead to an abundance of inefficient lighting of parking lots, streets, and signs, wasting valuable energy and preventing some Connecticut residents from seeing the natural wonder of the stars.

Problems caused by inefficient outdoor lighting are:

- Energy Waste and Pollution from the excessive consumption of nuclear and fossil fuels to produce the electricity powering our lights. This increased consumption causes a corresponding increase in pollution.
- Reduced visibility to motorists due to overly bright lights on buildings or glare from poorly shielded fixtures that can endanger pedestrians or other vehicles in their path.
- **Light trespass**—when light crosses boundaries where it is not needed or wanted—can lead to conflicts between neighbors.
- Higher utility bills because inefficient outdoor lighting uses excessive energy to achieve the desired level of illumination and too often illumination levels are higher than needed.

The efficiency of outdoor lighting can be improved by:

• Controlling light dispersement – fixtures for parking areas, walkway and street lighting should direct all their light to the ground and fixtures should illuminate signs from above rather than below.

- Using an appropriate level of lighting for example, architectural lighting should only illuminate the intended target. "Spill" lighting is avoided.
- Installing efficient lamps and timers low-pressure sodium is the most efficient lamp commonly used for outdoor lighting. Lights should have automatic turn-offs or dimmers during off hours.

In Connecticut, both state and local government are working to reduce light pollution. A state law was passed in 2001 requiring that all future streetlights be "full cutoff". Full cutoff is a classification where no direct light is visible from the fixture above the 90-degree horizontal. A second law was enacted in 2003 to require utility companies to shield all floodlights leased by the utility company for private property illumination. Effective October 1, 2004, the Connecticut State Building Code was amended to require full cutoff light fixtures for all new commercial construction.

At the local level a number of Connecticut municipalities have ordinances to control lighting. A good example is the ordinance that the Town of Branford passed in 1997 to control site lighting through a zoning amendment. Its purpose is to maximize the effectiveness of site lighting while avoiding unnecessary upward illumination and illumination of adjacent properties, and to reduce glare.

Residential lighting remains one area where manufacturers have not offered many fixtures that have light



pollution controls. One major CT lighting center located in Hartford has arranged with a national outdoor lighting fixture manufacturer to have several best selling units redesigned with light pollution controls and will be opening a new section of their store to "Good Neighbor Lighting."

As a consumer and taxpayer, you can take action to reduce pollution, save money, and stay safe, while opening up the beauty of the night sky. Listed below are some resources to help you get started:

International Dark-Sky Association-topics related to lighting, including safety, security, efficiency and types of lighting and compliant light fixtures. There are additional links and resources as well as fact sheets on reducing light pollution: www.darksky.org/index.html or call CT Section at (860) 668-4000

Town of Branford Zoning Amendment Concerning Outdoor Lighting: http://www.darksky.org/ordsregs/usamunis.html

CT Public Acts 01-134 and 03-210 about reducing light pollution: www.cga.ct.gov/2001/act/Pa/ 2001PA-00134-R00HB-05449-PA.htm www.cga.ct.gov/2003/act/Pa/ 2003PA-00210-R00HB-05686-PA.htm

Types of lamps for outdoor lighting and other environmental information about lighting - Pennsylvania Department of Environmental Protection: www.dep.state.pa.us/dep/deputate/pollprev/lighting/outdoor.htm











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

#### Dear Eartha:

My husband is an artist who uses many mediums in his work - oils, acrylics and watercolors. Sometimes we are not sure if an item is hazardous waste. How do we dispose of used turpentine, oil paints, etc.? Is there a web site or information that artists can use in order to be more environmental with their supplies? — Laurie C., Stratford, CT

Many art supplies contain ingredients that are hazardous. Even commonly used paints, like oil, acrylic and watercolor, may contain toxic heavy metals such as cadmium, chromium, and lead. Also, oil paints contain solvents and require clean up with solvents -- which are toxic and give off vapors that contaminate the air we breathe. If improperly disposed of, these hazardous paints and solvents can pollute the environment, affecting everyone's health.

You can reduce these risks by determining which of the art materials your husband uses contain hazardous ingredients -- and then finding and using safer alternatives. For example, a paint containing an iron-based pigment would be preferable than one with a more toxic lead chromate or cadmium pigment. Below are some websites with information on the different paints and art supplies that should help you choose safer materials.

If you are planning on disposing of any oil paints, solvents (such as turpentine or mineral spirits), or other paints that have hazardous ingredients (such as cadmium or lead), please save these items to bring to a household hazardous waste collection. Most of the collections are held in the spring or fall and a list of scheduled collection days for your community is posted on DEP's website:

www.dep.state.ct.us/wst/ recycle/hhwsched.htm. You can call the contact number listed by the collection information to see if a particular item is would be accepted. For questions, please contact Tom Metzner, DEP, at (860) 424-3242 or tom.metzner@po.state.ct.us.

- Eartha

#### **Resources for Artists**

**Best Management Practices for Fine Art Painting Studios:** 

www.narrabay.com/Documents/PDFs/FineArtBMP.pdf

A Searchable Database of

Health & Safety Information for Artists:

www.ci.tucson.az.us/arthazards/medium.html

What can be Hazardous about Arts and Crafts?:

www.trueart.info/arts & crafts.htm

### Dear Readers:

Now with wintery weather in the forecast, quite a few of you asked me which ice melt products are safe for both the environment and your pets.

Unfortunately, most of the chemicals found in de-icing products have some negative impact. Sodium, magnesium, potassium or calcium chlorides are the most commonly used, but the most problematic. Although they are effective at low temperatures, these salts corrode metal and concrete, damage vegetation, and cause severe skin irritation in pets. Calcium magnesium acetate has a slight effect on concrete, metal and plants but it is expensive, works slowly and can negatively affect water quality. Urea (Carbonyl diamide) is safer for pets and vegetation but is not always effective under 20 degrees F, corrodes metal, and can cause severe water quality problems.

A better option would be to avoid the chemicals altogether by using sand or crushed gravel. To prevent damage to any nearby streams, you should sweep up the sand afterward to reuse for the next storm. Another alternative is using reusable "ice breaker" mats that you attach to your stairs, landing, or walkway. When ice forms, all you have to do is simply step on the specially designed mat and the ice breaks up -- making it easy to kick or sweep away. These mats can be bought on-line and in stores.

For more information on de-icers, see "Let it Snow!" (P2 View, Winter 2003-04) -

www.dep.state.ct.us/wst/p2/ p2View/p2viewwinter2003-04.pdf



STATE OF CONNECTICUT
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For a free subscription, please contact Judy Prill at (860) 424-3694 or e-mail your request to judith.prill@po.state.ct.us. If you want to save paper and postage by reading the P2 View electronically, you can either subscribe to the listserv or view it on-line (see www.dep.state.ct.us/wst/p2/).

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### P 2 C A L E N D A R

### A SELECTION OF ENVIRONMENTAL EVENTS

#### **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 Mary Sherwin at (860) 424-3246 or go to www.dep.state.ct.us/calendar/calendar.htm.

#### January 26, 2006 10:00 am Green Roofs

Stormwater and energy benefits from green roof on South Central CT Regional Water Authority's new water treatment plant. Ted Norris (SCCRWA) and Charlie Miller (Roofscapes, Inc.).

> March 21-22, 2006 ConstruCT 2006 Expo Hartford, CT

Comprehensive construction industry conference including track sessions on Green Building in CT. For more information, contact the Construction Institute at the University of Hartford at (860) 768-4459 or www.construction.org.

#### February 8, 9, 10, 14, 15, 2006 Organic Land Care Course New Haven, CT

An intensive five-day course based on the Northeast Organic Farming Association (NOFA) Standards leading to an accreditation as an Organic Land Care Professional. Contact CT NOFA for more information at (203) 888-5146 or www.organiclandcare.net/

### February 28, 2006 10th Annual Design & Construction Industry Joint Dinner Rocky Hill, CT

Networking opportunity for members of professional associations related to design and construction industry. The CT Green Building Council will be participating. For more information, contact AIA Connecticut (American Institute of Architects) at (203) 562-5378 or www.aiact.org.