

ISSUE 1, VOLUME 3

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

SPRING 2001

# How will you celebrate Earth Day 2001?

## What is Earth Day?

Since 1970, Earth Day has been an annual event for people around the world to celebrate the earth and our responsibility toward it. Earth Day is actually April 22 but events are usually scheduled for the weekends before or after April 22.

## What can I do?

**There are many ways you can celebrate and show your concern for the earth. Here are just a few ideas.**

- Attend an already-organized Earth Day event or organize one of your own, such as a tree planting, a river clean-up or a book swap.
- Change a habit at your workplace, try organizing a carpool or using less paper by making double-sided copies.
- Make your home more energy-efficient. The Home Improvement Tool on the Energy Star web site [www.epa.gov/hhiptool/](http://www.epa.gov/hhiptool/) will help you get started.
- Help start a community garden.
- Switch to Green Power at your home or business. For more information, contact the CT Energy Co-op at 1- (888) 481-3955, [www.energyforme.com](http://www.energyforme.com) or contact other suppliers offering to provide electricity from renewable resources.
- Go hiking or fishing.
- Communicate your environmental priorities to your elected officials.

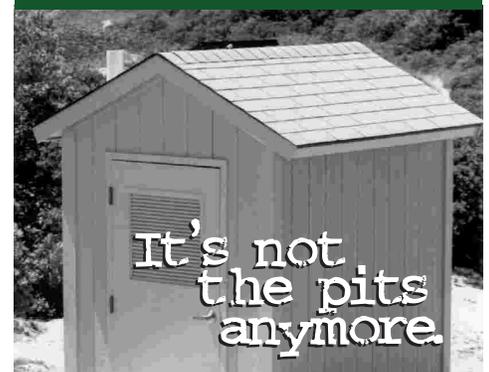


## NEED HELP GETTING STARTED?

Visit the Earth Day Network web site [www.earthday.net](http://www.earthday.net) for information on events being held near you. If you want to organize an event, there is a section with ideas and helpful tips.

You needn't wait for April 22 to help out the Earth. To build a better future for the environment we need to be working toward solutions year-round. Earth Day is just a good reminder to do something nice for the earth, meet new people, make a difference, and have fun!

## I N S I D E



# NICE<sup>3</sup> is Nice to Connecticut Industries and the Environment

**Do you have a new technology that is almost ready for the marketplace, but you need an infusion of cash to prove it to the world? Or, are you looking for a new way to make widgets? One that will save money and energy and cut pollution?**

If so, or if you're just turned on by new technologies, you'll want to know about the US Department of Energy's program, NICE<sup>3</sup> (National Industrial Competitiveness through Energy, Environment, and Economics.) The program provides grants of up to \$525,000 per project to jump-start new technologies that save energy, lower costs, and cut pollution. Since 1995, partnerships between Connecticut industries and the Connecticut Department of Environmental Protection (DEP) have brought \$2 million into the state for five NICE<sup>3</sup> projects. The funding has helped industry overcome the risks of demonstrating a new technology for the first time in a commercial setting.

Connecticut's most recent NICE<sup>3</sup> grant award will be used to demonstrate a technology that could revolutionize industrial welding. Currently, electron beam welding, which is the highest quality welding technique available, must be performed in a large vacuum chamber. Brookhaven National Laboratory has developed a plasma window that can take the place of the vacuum chamber. Acceleron, Inc. will demonstrate this groundbreaking electron beam welding technology at their plant in East Granby, Connecticut. **The elimination of the vacuum chamber will result in direct energy savings of 80 – 90% and significantly reduce associated pollutants and expenses.** Of even greater impact, is the fact that the plasma window allows electron beam welding to move out of the confines of a small box (the vacuum chamber), making electron beam welding possible on pieces of unlimited size in unrestricted industrial locations.

The US Department of Energy (DOE) has provided a grant of \$525,000 to fund Acceleron's demonstration of the technology and its subsequent commercialization. Another \$250,000 comes from the Conservation and Load Management Program administered by Connecticut Light & Power. Acceleron has committed over \$519,000, including the use of their plant, machines, and personnel. Brookhaven National Lab will continue to play a vital role in technical support of the plasma window.

Advanced Fuel Research (AFR) in East Hartford was awarded a \$305,000 grant from the DOE last year to demonstrate a new, portable, low-cost multi-gas analyzer that performs continuous emissions monitoring and greatly improves the combustion efficiency of industrial boilers and advanced gas turbines. The system is a marriage of Fourier Transform Infrared Spectroscopy advanced mechanical/optical design, and advanced electronics for data sampling and processing. This novel combination of existing

technologies greatly improves continuous emissions monitoring, while providing an on-line "combustion tuning" tool for on-site power generation. This will dramatically reduce fuel requirements and subsequent air pollution. **When compared to conventional systems, the substantial improvements in dependability and efficiency brought by the AFR analyzer lower energy costs by 70%.**

An innovative technology developed by Green Technology Group of Sharon, Connecticut will yield significant energy and pollution savings for the steel industry. Green Technology Group received a \$475,000 NICE<sup>3</sup> grant in 2000 to demonstrate a unique system for regenerating spent hydrochloric

acid from steel pickling. Conventional pickling technology generates 1.5 billion gallons of spent pickle liquor nationwide each year, resulting in costly and energy-intensive handling, treatment, and disposal. The Green Technology process uses sulfuric acid to restore hydrochloric acid for reuse. **This on-site regeneration system enables closed-loop pickling.** The technology eliminates the costs of transporting, treating, and disposing of spent pickle liquor and the financial and environmental costs associated with generating hydrochloric acid to replace the spent liquor solution. **This translates into energy savings of 95%, cost savings of 52%, and a 91% reduction in carbon dioxide emissions, compared to existing technology.**

Maybe some of these technologies or NICE<sup>3</sup> technologies demonstrated in other states could improve your environmental performance while saving money and increasing productivity. Look on the web at [www.oit.doe.gov/nice3](http://www.oit.doe.gov/nice3) for project descriptions and fact sheets of the projects that have been sponsored nationally. If you're interested in finding out more about Connecticut's NICE<sup>3</sup> technologies or applying for a grant, **contact Lynn Stoddard, CT DEP Office of Pollution Prevention, at 860-424-3236.** The solicitation for the next round of funding is now available. Applications will be accepted through late June. ■

Save  
Energy,  
Lower  
Costs,  
Cut  
Pollution

# All Choked up Over Spring Cleaning?

**Most everyone agrees that a clean home is better for your health than a dirty one.** But some cleaning products can cause health problems themselves. Many products that we use all the time contain hazardous chemicals that with repeated or excessive contact may lead to lung problems, brain and nerve damage, cancer and even death.

## A product is considered hazardous if it's:

- Toxic (can injure or kill if swallowed, inhaled or absorbed through the skin)
- Flammable (may explode or ignite, even when cool)
- Corrosive (can cause permanent tissue damage through contact)
- Reactive (creates an explosion or produces deadly vapors).

Hazardous chemicals can often be found in these common cleaning products: drain cleaners, floor-care products, oven cleaners, window sprays, bathroom cleaners, furniture and metal polishes, and laundry products. You can learn to avoid these chemicals by reading the labels. Those labeled **Danger** or **Poison** are typically the most hazardous. Others may be labeled **Caution** or **Warning** because they are skin or eye irritants. Near these signal words will be a phrase that describes the nature of the hazard, such as "vapors harmful" or "extremely flammable". There are less hazardous alternatives to many cleaning products available in most stores, or you may also choose to make your own.

## Here are a few examples:

**Oven Cleaner** – Scour with baking soda and water. To prevent grease build-up, always clean spills as soon as the oven cools down.

**Drain Cleaner** – Dissolve a 1/2 cup of baking soda and a cup of vinegar in boiling water. Pour the mixture down the drain. A plunger can also help get things going.

**Window Cleaner** – Mix 1/4 cup vinegar, 1/4 tsp. hand dishwashing soap, and a pinch of cornstarch in a bucket of warm water. Wipe down windows with this mixture and dry with a lint-free cloth.

Check your local bookstore or library for books on safer cleaning, such as **Clean House, Clean Planet** by Karen Logan, **Home Safe Home** by Debra Lynn Dadd, and **Better Basics for the Home** by Annie Berthhold-Bond. They can be a valuable resource for happy, healthy cleaning! ■

## Did You Know?

**One of the most common home accidents is the mixing of products containing chlorine bleach with those containing ammonia. The chemical reaction that results produces chloramine gas, which is highly irritating to the lungs, causing coughing and choking.**

## What You Throw Away Can Come Back to Haunt You!



**Hazardous products thrown in the trash or dumped down the drain can pollute the environment, affecting everyone's health. The best disposal for most hazardous cleaning products is to use them up gradually as directed or give them to someone who can. If you can't do either, take them to a hazardous waste collection day. A list of the collection days for your community is on the DEP website [www.dep.state.ct.us/wst/recycle/hhwsched.htm](http://www.dep.state.ct.us/wst/recycle/hhwsched.htm) or call the DEP Pollution Prevention Office at 860-424-3297.**

## WHAT'S NEW IN P2?

### Creating a Healthy Home

If you are like most people you have heard that there are things you can do in your daily life to reduce pollution, benefit your health and save money, but are not sure how to get started. DEP has recently developed a new brochure and display board, each entitled, "**A Green Home is a Healthy Home**", which can provide some answers and ideas for you! If you would like to help spread the word or learn more, you can request a brochure or borrow DEP's tabletop display. **Please call the DEP Pollution Prevention Office at 860-424-3297 for more information.**

### Environmental Dentists

It may come as a surprise that dentists can help protect and restore the nation's rivers and lakes with simple changes in the way they dispose of their wastes. That's why the DEP teamed up with the National Wildlife Federation on **The Environmentally Responsible Dental Office Guide**, which shows dentists ways to limit the amount of mercury and other chemicals entering the environment. The Connecticut State Dental Association approved the guide and copies were distributed to dentists throughout the state. **For a copy of the guide, please call the DEP Pollution Prevention Office at 860-424-3297.**

### It's Not the Pits Anymore!

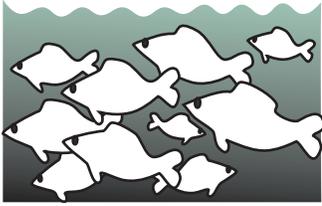
The DEP is **upgrading its pit toilets to composting toilets** at many of our state parks, forests and campgrounds. Why the switch? Composting toilets use no water, treat human wastes on site, and do not pollute the groundwater. Air flow through the composter provides an oxygen-rich environment, accelerating decomposition—**resulting in an odor-free operation.** You can find single unit composting toilets at Green Fall Pond Campground, Bluff Point, Sherwood Island, Chatfield Hollow and Pachaug State Forest. Installations this Spring include Macedonia Brook, Putnam Memorial, Talcott Mountain, Southford Falls, Bigelow Hollow, Topsmead State Forest and Natchaug State Forest. A multi-unit composter has been installed at Hopeville Pond Campground and another is planned for Gillette's Castle visitor center this summer.

# P 2 C A L E N D A R

## A S E L E C T I O N O F P 2 R E L A T E D E V E N T S

APRIL 21, 2001

### Source to Sound Clean-up



Celebrate Earth Day by cleaning up the beaches near Long Wharf and New Haven Harbor. Come to the Peabody Museum of Natural History for orientation anytime between 8 a.m. and 2 p.m. – buses will run from the museum to the clean-up sites. Each volunteer will receive a River Clean-Up T-shirt, gloves and garbage bags. For further information and directions, visit the Peabody's website at: <http://www.peabody.yale.edu>

APRIL 22, 2001

### Southeastern Connecticut's Earth Day 2001 Festival

Everyone is welcome to attend to this outdoor festival which includes music, children's activities, exhibits, environmentally friendly vendors and more. The celebration is free and will be held from 10 a.m. – 5 p.m. at Connecticut College in New London. For directions :



JUNE 28, 2001

### Mercury Thermometer Swap



Protect your family's health and the environment – bring your mercury fever thermometers and receive a FREE digital thermometer for each mercury one. This one-day swap will be held from 11 a.m. to 2 p.m. at the Jefferson Street loading dock at Hartford Hospital. For more information and directions, visit Hartford Hospital's website at: <http://www.harthosp.org/WhatsHappening/index.html>

APRIL – JUNE, 2001

### P2 Lecture Series



DEP sponsors a monthly lecture series on pollution prevention topics. Lectures are held from 11:00 a.m. to noon in the Phoenix Auditorium, DEP Building, 79 Elm St., Hartford. All lectures are free and open to the public. For additional information, contact Lynn Stoddard at 860-424-3236.

April 18, Genetically Modified Agriculture, A New Paradigm: Promises and Fallacies, John Sokoloski, PhD. Retired from Yale

May 23, Political and Practical Animals: Sustainable Animal Farming, Bill Duesing, Northeast Organic Farming Associ-

June 6, Helping Communities Grow Smart. Alison Walsh, EPA Region 1



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