



**POLLUTION PREVENTION VIEW**  
A Newsletter from the Connecticut Department of Environmental Protection FALL 2000



## WELCOME TO P2 VIEW!

**P2 View** is the new quarterly newsletter of the **Connecticut DEP's Office of Pollution Prevention**, whose mission is to help industries, individuals and institutions to **reduce** or **eliminate** the **waste and pollution** they create.

In each issue you will find updates on Connecticut pollution prevention projects and activities, a calendar of events and other information of interest to readers. **Let us know what you think!** For a free subscription, fax or e-mail your request.

If you prefer to receive the newsletter electronically, send your e-mail address to: [elise.bennett@po.state.ct.us](mailto:elise.bennett@po.state.ct.us) or fax it to (860) 424-4081.

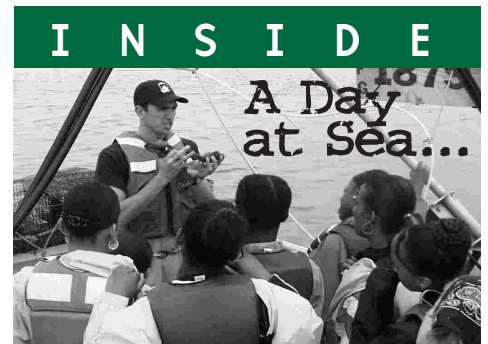
# Hartford Houses Save Energy

**What's warm in winter, cool in summer, inexpensive to operate and environmentally friendly?**

Hartford's new geothermal houses! The third of 5 two-family, geothermal houses being built in the Lawrence and Grand Street redevelopment area is about to be completed and occupied by a new owner.

The houses feature geothermal heating and air-conditioning systems that do not require oil or gasoline, but instead use electric pumps to transfer (warm or cool air) energy from the ground. Northeast Utilities will monitor the energy costs and expect owners and tenants will realize a 42% energy cost savings. Rodney Powell, Regional Vice President for Connecticut Light & Power Company announced during a February open house that the homes are costing owners \$126 per month for heating, cooling, appliances and lighting. The five homes will be owner occupied and sell for about \$110,000 to low to moderate-income residents. The 1st and 2nd floors each provide 3 bedrooms, 1 bath with washer/dryer hookups and a large dining room/ living room area in the 2,800 square foot building.

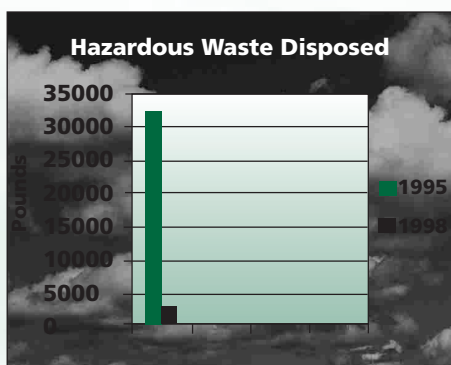
*(continued on back cover)*



# Connecticut Spring Exhibits Exemplary Environmentalism

**What are the qualities of an environmentally active industry?** Take a look at Connecticut Spring & Stamping Corporation – in 3 years they have: **Reduced tetrachloroethylene (perc) purchases by over 98%; Minimized perc hazardous waste generation by over 95%; and Eliminated over 99% of their perc air emissions.**

The company has reduced its waste management costs, eliminated some regulatory requirements, and changed its status from a Large Quantity Generator of hazardous waste to a Small Quantity Generator. **Thank you,** Connecticut Spring and Stamping. Connecticut now has a cleaner environment, the workplace is healthier, and you've assured customers and neighbors of your environmental stance.



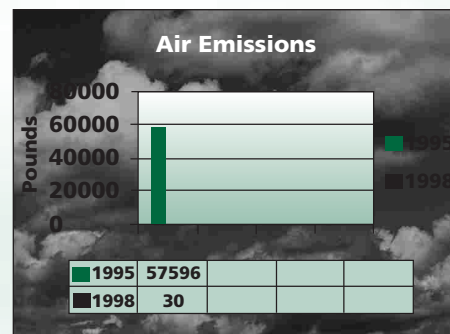
Connecticut Spring and Stamping Corporation has been in Farmington since the 1960's. Today it employs 450 workers, making a variety of spring products from both wire and sheet metal. After the winding, bending, stamping and grinding operations, some products must be cleaned before a final finish can be applied. Connecticut Spring and Stamping has found that **perchloroethylene (perc) is the most effective material for this cleaning.** Because perc is a hazardous air pollutant, and suspected of causing cancer in humans, **the cleaning process is where environmental decision-making critical.**

The company analyzed their cleaning process and found that their old equipment used large quantities of virgin perc, was expensive to operate, resulted in emissions problems and high disposal costs. The Federal Clean Air Act Amendments required emissions reductions for vapor degreasers that the company had difficulty meeting, in addition to Title V air permitting requirements. Out of concern for employee health, **the company wanted to limit the exposure of its workers to perc.**

The solution to this problem was not immediate. In 1996 Connecticut Spring began to modernize its cleaning process with the purchase of two modern open top degreasers. **This cut its virgin perc purchases by about 50% and its emissions by 70%.** Although this was a significant improvement, the company was not satisfied. Connecticut Spring researched different cleaning processes with other solvents, but none were as effective as perc and all required a large capital investment.

Finally in 1998 the company purchased two modern closed-loop systems with a chiller unit which eliminated a wastewater discharge, and provided automatic parts handling and programmable controls. **This reduced perc consumption and emissions and brought the company into compliance with environmental regulations.** The company reduced perc purchases from over 89,000 lbs. in 1995 to less than 3000 lbs. in 1997, the emissions went from over 57,000 lbs. to 30 lbs., and they disposed of under 3,000 lbs. in 1997, down from 32,000 in 1995.

Some problems with the new system arose initially. The vendor addressed them and changed procedures to ensure that



there will be no re-occurrences in new installations. There was about a three-month period of adjustment for the employees, mostly due to the increased maintenance requirements of these machines. Unlike the traditional open-top systems, these are state-of-the-art systems with specific operating and maintenance requirements. When operated and maintained correctly, they produce more consistent and higher quality results with **dramatically reduced perc wastes and emissions.** The company's environmental manager reports that the company has become a Small Quantity Generator (SQG). With this change comes less overhead and fewer regulatory requirements. **Their emissions are now approximately 20% of the EPA standard for vapor degreasers.** This is quite an accomplishment!

**The company calculated saving \$44,450 per year in purchases of perc and disposal of hazardous waste with the new system.** The employees are pleased with the new system especially because of dramatically reduced odors and elimination of the need for personal protective equipment or an exhaust system. Even Connecticut Spring and Stamping's customers are happy with the new environmentally friendly process. The company also reports that there seem to be some labor savings with the new system, but these have yet to be quantified. **Pollution Prevention works! ■**



## Students Win a Day at Sea

How do you tell a female lobster from a male lobster? **The winners of the Hartford Neighborhood Environmental Project Poetry and Poster Contest know how!** Each year the CT DEP and four Hartford neighborhood organizations sponsor a poetry and poster contest as part of the citywide Earth Day celebration. The contest is open to Hartford's fourth, fifth and sixth graders. This year, contest winners were rewarded for their work with a daylong outing to the **Northeast Utilities (NU) Marine Research Facility on the Long Island Sound.**

The field trip gave students a hands-on taste of marine biology. **The NU marine biologists enthusiastically guided the students** in their daily environmental research and monitoring. This included seining, which allowed them to dig through slimy seaweed for crabs and fish to be placed in tanks for study, and venturing out in the NU boat to trap and tag lobsters. The children couldn't wait to pick up the crabs, fish and other animals in the live touch tank. The youngsters also learned to use the microscope to view the plankton living in the water samples they collected. It was a full day of fun and learning for students and adult participants alike, and **a great finish to this year's Earth Day celebration.** ■

## WHAT'S NEW IN P2?



You can become one of a group of informed folks by attending the P2 Lecture Series. Take advantage of this little-known monthly opportunity offered in the DEP's Phoenix Auditorium for learning about pollution prevention. The P2 Lecture Series has been running for 3 years primarily to the benefit of DEP employees and a few others who know a good thing. Now you can spend an hour once a month and learn something new about Pollution Prevention. **Topics of past lectures include Sustainable Lawn Care, Purchasing Green Power in Connecticut and Contribution of Copper-based Architectural Material to Copper Concentrations and Toxicity in Storm Water Runoff.** Join us for our Popular Pollution Prevention Lecture Series. Future lectures include "Mercury Reduction at Hartford Hospital" on Wednesday, September 20th and "Shaklee: The First Climate Neutral Certified Company" on Wednesday, October 18th **For general information about upcoming lectures you may call the DEP P2 Office at (860) 424-3297.**

# 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

SEPTEMBER 18-23, 2000



**Pollution Prevention Week**  
A national celebration and promotion of Pollution Prevention. This year's theme of National Pollution Prevention Week is P2 and Children's Health. As part of the celebration the DEP will help remove the risk of exposure to mercury for children through a Mercury Thermometer Exchange for Downtown Hartford during the week. Please call the DEP P2 Office for date, time and location at (860) 424-3297.

WEDNESDAY, SEPTEMBER 20



**Hartford Hospital Campaign to Eliminate Mercury**

P2 Lecture as presented by Darlene Powell, industrial hygienist, SafetyWorks, Dept. of Environmental Protection, 79 Elm St., Phoenix Auditorium 11:00 a.m.

THURSDAY, SEPTEMBER 21



**Green Circle Awards Presentation**

The Department of Environmental Protection will present awards to businesses, municipalities, individuals or groups nominated for their pollution prevention activities. Seating is limited. Those interested in attending should contact Chris Kaiser at (860) 424-3696

FRIDAY, SEPTEMBER 29



**Climate Wise Energy Efficiency Forum,**  
9 am – 1 pm., Pitney Bowes in Stamford, CT. For more information or to register please contact Connie Mendolia or Lynn Stoddard at CT DEP, at 860-424-3297.

WEDNESDAY OCTOBER 18



**"Shaklee: The First Climate Neutral Certified Company"**

P2 Lecture as presented by Ruth and Jim Barnes, Shaklee Corporation, Dept. of Environmental Protection, 79 Elm St., Phoenix Auditorium 11:00 a.m.

### Hartford Houses *(continued from cover)*

At the February open house, Hartford's Mayor, Mike Peters, stressed the importance of improving the community with new affordable owner occupied housing. He said this home is built on a former "site of drug activity that was bringing the entire neighborhood down. These new homes are bringing about a positive neighborhood transformation."

Builder, Krish Narain, of Northern Enterprises Home Manufacturing won the contract to build the energy efficient houses on Lawrence Street from the City of Hartford in March 1998. Since the first house was completed a year later, Naraine has received national recognition for this work. He was named the winner of a "Best in American Living Award", sponsored by Professional Builder magazine and the National Association of

Homebuilders in Washington. The award honors homebuilders and contractors whose homes illustrate design quality and success in the marketplace. The project was also one of nine to receive the HUD Secretary's Award for Excellence.

Five houses will provide energy efficient homes for 10 Hartford families. Building has been slow, but demand is not. Two of the houses are now fully occupied and the other 3 have sales agreements. Building has been slow because Naraine is making an effort to employ contractors from the neighborhood, who, like he will have a vested interest in building high quality homes in their own backyards. ■



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P2 View is published by the Connecticut Department of Environmental Protection, Office of Pollution Prevention. Editor: Elise Bennett; Contributors: David Westcott, Judy Prill, Kim Trella, Mary Sherwin, Lynn Stoddard and Connie Mendolia.