

NewsBits

Summer 2008 Volume 2, Number 2

Taler FUN FACTS

- 97 % of earth's water is in the oceans. Only 3% of the earth's water can be used as drinking water. 75% of the world's fresh water is frozen in the polar ice caps.
- In 1908, Jersey City, New Jersey and Chicago, Illinois were the first water supplies to be chlorinated in the United States.

Mississippi River Floods Move South

Levees threatened by possible record-setting water levels

Floodwater in northern Iowa and northern Illinois has begun to recede, but downstream riverfront towns in southern Illinois and Missouri are fighting peak-level water. On July 18, at least two Mississippi River levees were breached. More than two dozen remain in danger.

In lowa, recent floods have caused an estimated \$1.5 billion in damage, eliminating thousands of acres of crops and sending tens of thousands of residents from their homes.

Cities along the currently overwhelmed river raised and repaired levees following the severe floods of 1993. Many experts and residents predict the ongoing flooding will meet or exceed the 13-ft-plus cresting levels of 1993.

Source: ABC News June 19, 2008



CONGRATULATIONS to all of the many June graduates. We wish them continued success as they go forth into the future

These graduates are entering a very new and challenging world where the price of fossil fuels (oil – propane – gas) continues on a trend that is up, up and away. The cost of these fuels is literally going up every day and affects just about everything in our economy, food, transportation, heating and cooling our homes and businesses, to name just a few. The American and Global public is screaming to do some thing about these out of control costs.

How can we help stop this rising and polluting trend? One answer is all around us, in the ground.
GeoExchange or as we call it
Geothermal has been around for thousands of years. It is renewable and reduces heating and cooling costs dramatically once installed. B.L. Myers has been drilling Geothermal wells

since the early 1980's. It is truly green, producing no greenhouse gases. More and more projects, schools, businesses and homes are going Geothermal. Calls to B.L. Myers for Geothermal wells come in on a daily basis.

Recently on May 7th, B.L. Myers exhibited at the PCPG Symposium at the Hershey Lodge in Hershey, PA. The theme was water and the environment. Geothermal was a featured item at our booth. Also, on May 27th, B.L. Myers was part of a feature story in the business section of the "Daily Local News" titled "Geothermal Fanbase Rises" (See entire article on the next page). Pictured was Paul Flynn operating a drill rigs residential on a Geothermal site in West Bradford Township, PA. As Dave Myers states in the article "Going green is a big topic right now, but this is something that has been around for thousands of years this is not a fad". The Future is Now.

Our new service van is relaying the message. For more information on all our green technologies go to www.blmyers.com



Geothermal Fanbase Rises

By BRIAN McCULLOUGH Daily Local News Staff Writer

Bruce Durnan refers to himself as "the guinea pig" of his Estates at Broad Run neighborhood. Only three years into his 4,000-square-foot home in the upscale West Bradford neighborhood, Durnan said he has tired of the ever-escalating cost of propane he buys to heat and cool his house. He is having a geoexchange system installed, a move that will cost him more than having a traditional oil or natural gas unit put in, but one he's confident will save him money in the long run.

Durnan said he began seriously considering an alternative to his gas propane system when the bills reached \$600 to \$700 every six weeks. He estimated he pays \$4,500 to \$5,000 a year for heating, cooling and hot water. With the new system, those costs should be reduced to \$1,300, he estimated. Durnan, 42, is like a lot of customers who are making the shift to geoexchange, or geothermal, as it is often called. College-educated, with a background in science, Durnan, a computer programmer, works from home, as does his wife. They have a 2-year-old son and another child on the way. "I had heard about it in college and then saw a show about it on 'This Old House' in February or March. Then I got one of those gas propane bills. I went to my wife and said, 'I want to tell you something.' She said, 'if you think it's for the best.' So I went on the Internet and started doing research."

There was good reason for the couple to proceed cautiously. The upfront costs of installing a geoexchange system are considerably higher than buying a traditional system, due mostly to the cost of drilling the necessary holes. For Durnan and his wife, Anna Laura Martinez, who are having four 300foot bores drilled in their side yard one more than they currently need, for when they finish their basement - the cost is \$42,000. "This is not a process you should step lightly into," Durnan said. At current prices, it will take six or seven years for the system to pay for itself, Durnan estimates. If fuel prices continue to rise, the payoff period will be shorter. The financial benefits come after that, but Durnan is moving forward with other plans to reduce his carbon footprint. "I'm getting a Mini Cooper, too," he said.

Geothermal heating-and-cooling systems tap into the constant, moderate temperatures found below the surface of the earth - 53 degrees in Chester County, according to Bill Sinton, president and owner of Sinton Air Conditioning and Heating Inc. in Kennett Square, who is putting in the Durnan system and has been doing geothermal work since the 1970s. In its most basic terms, a geothermal system removes heat from the earth to heat buildings in the winter and removes heat from inside to cool them in the summer. The system captures the free energy from the earth by using a series of pipes buried in the ground. Multiple holes are bored about 10 feet apart. A double pipe connected with a U-bend is inserted into each hole. The hole is filled with grout to provide good contact around it and to seal it. The vertical pipes are connected to a header system horizontally a few feet below the surface. Capacity is not based on depth but rather on how much pipe is in the ground and the overall conductivity of the borehole. Sinton said he has never had a problem with leaking pipes because



Photo by Daily Local Staff Photographer Amy Dragoo

Paul Flynn of B.L. Myers operates the drill as he digs the first of four 300' holes for Geothermal heating for a house in West Bradford.

they are made of high-density polyethylene. "We have hundreds of miles in the ground and have never had a leak because there are no joints in the pipe," he added. While there are several ways to form the loops, in

"Going green is a big topic right now, but this is something that's been around for thousands of years, this is not a fad."

David Myers, President & CEO, B. L. Myers Bros.

Chester County the preferred method is called a vertical closed loop that requires holes to be drilled and connected with piping. Geothermal systems are not new. They were introduced in the U.S. in the late 1940s and used in ancient times by the Greeks and Romans. But interest in them has jumped in recent years as the price of traditional energy sources have increased. "Our fastest area of growth has been the Northeast," said John Kelly, executive director of the Geothermal Heat Pump Association, a nonprofit national trade group based in Washington, D.C. "Oil is more common in the Northeast," Kelly noted. "Our volume of calls for references is up there."

Some Chester County business owners are seeing the same thing. At B.L. Myers Brothers, a drilling company that specializes in water wells and remediation work, geothermal is making up an increasing percentage of the business, said David B. Myers, president and CEO of the 124-year-old West Brandywine tirm. While the water business has been hurt by the growth of water utilities and the residential building downturn, geothermal has picked up to the point where it now makes up about 30 percent of Myers' work. The company has been drilling geothermal wells since the early 1980s and has done jobs for West Chester University, the Spring-Ford School District, Easttown and West Bradford townships and the Hershey's Mill retirement community among others. It is about to begin drilling holes for the avian building at the Philadelphia Zoo. "Going green is a big topic right now, but this is something that's been around for thousands of years," Myers said. "This is not a fad."

When West Bradford built a new barrack to lease to the state police in 2004, it decided to heat and cool it with geothermal. Troopers there liked it so much that when it came time to replace the heating and cooling system in the township building, West Bradford went with geothermal again. Township Manager Jack M. Hines said

the system that's being installed now will replace four oil burners and a 2,000-gallon oil tank. Even at an initial cost of \$400,000, Hines said the township originally expected the system would pay for itself in 10 years. As oil prices rose, it lowered that estimate to seven years. "That feels very good," Hines said. "Unfortunately, with the price of oil going up, it feels better every day. It may be a shorter period." Hines was impressed enough with the systems that he decided to put one in his own house. "It just seems too easy to me," he said. According to the U.S. Department of Energy, there are 1 million-plus geothermal systems in operation in the U.S., with 50,000 new geothermal heat pumps installed each year. To date, the market has been dominated by government institutions and school districts that plan to stay in their buildings 25 to 30 years and businesses looking to cut down on operations costs. When oil was \$25 to \$30 a barrel, geothermal couldn't compete with traditional fuels due to the high initial costs, Myers noted. Now with oil topping \$135 a barrel, it's a different story, he said. "We just received four calls this morning," Myers said recently as he watched two Myers workers drill the first hole for Durnan's new system. In East Pikeland, Earth Rising Homes of Phoenixville is developing a mixed residential/retail development on Prizer Road using geothermal heating and cooling as well as solar panels on the roof. The 20-unit development to be called Kimberton Village Green is in its final design with Earth Rising's president, Dan Orzech, hoping to begin building next year. Orzech said he has no concerns about using geothermal in his development because he has it in his home. "I didn't want to send any more money overseas to heat and cool my house," he said. "It's kind of all over the place but people don't know about it, in part because it's not flashy. It's not like having solar panels on the roof. What I love about it is you're not burning anything. There's no carbon monoxide in the house." In Newlin, luxury home builder Wayne Megill is offering a geothermal heating system, worth as much as \$40,000, for free through spring at his Pocopson Creek Estates as an incentive to potential buyers. And for Bill Sinton, geothermal now makes up 90 percent of his air conditioning and heating company's business. As a measure of growth, Sinton said he put in seven geothermal pumps in 2002; in the past year he put in 100. "I believe we are just starting to see the enlightenment period right now," he said. "In today's market, I spend most of my time taking out oil or liquid propane gas systems and putting in geothermal. The customer will get his return on investment in four to six years. After

that, they're printing money."