

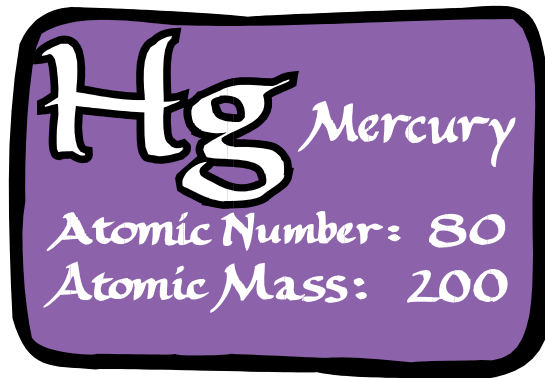


Land Revitalization Newsletter

MAY 2009

U.S. EPA Region 6

It's Elemental—It's Mercury—It's Dangerous



Most people know what elemental mercury looks like. It is that shiny, silver-gray metal that is a liquid at room temperature. We learned in science classes it has the chemical symbol Hg, has been known since ancient times and is commonly called quick silver or azogue. It can be found in thermometers, barometers, electrical switches, batteries, fluorescent lights, and blood pressure devices, and before the 1990's, it was commonly found in household latex paint. Many people don't know however, that mercury is highly toxic in all three of its environmental forms: 1) elemental (liquid) mercury, 2) mercury salts and 3) organic mercury.

It is not as dangerous when ingested or rubbed onto the skin. Only a small amount (0.01%) is absorbed making toxicity from this route rare. The most common route of exposure is by inhalation of mercury vapor. When inhaled, about 80 percent is absorbed into the blood stream. When liquid mercury is spilled or allowed to come in contact with air, it evaporates. If it is heated by spilling it on a hot surface it evaporates at a much faster rate, making exposure much greater. These levels can persist in the home for many months, especially if no one has properly removed the mercury. It accumulates in the body, eventually causing severe illness or even death. Acute or chronic exposure to mercury vapor causes effects to the pulmonary and central nervous systems. Young children are at the greatest risk of developing pulmonary toxicity.

If a moderate to large mercury spill should occur, precautions should be taken. Call the U.S. Environmental Protection Agency (EPA) Region 6 office about cleaning up a mercury spill at (800) 533-3508 (toll-free). For more information see the following links:

[Mercury Spills in Your House](#)

[Information for Health Care Providers](#)

[Health Effects of Mercury Exposure](#)

[Mercury Facts for School Nurses](#)

First LEED Platinum Children's Hospital in the World!

Are you building a hospital? Healthcare facilities are expensive. They are expensive to build and expensive to operate. In fact, they use nearly twice as much energy per square foot as office buildings, accounting for a \$3 billion plus spending each year in electricity alone. However, savings on electricity was just one unique part of the design of this project. Clearly, Dell Children's Medical had energy and many other things in mind when it earned the highest environmental award in the world for its innovative green-building design. Green buildings save energy, water and money, they make good sense for any enterprise, but they also have a huge impact on human health and well-being. This facility is built to meet patient needs. Layout provides the healing of natural light in 80% of the building; at no time is one more than 35 feet from a window. There is increased sensitivity to chemicals and pollutants, improved air quality, minimal traveling distance to parking, access to nature, the outdoors and artwork.

Seton Family of Hospitals
Dell Children's Medical Center
of Central Texas
4900 Mueller Blvd., Austin, TX 78723
Phone: 512.324.0000



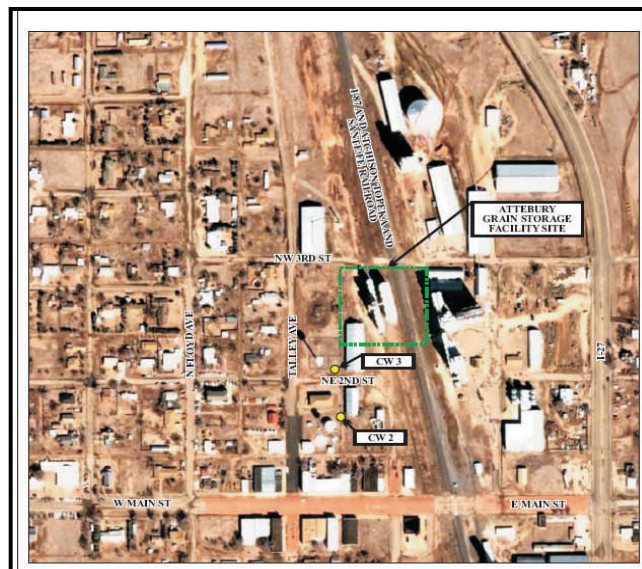
All this effort resulted in the award of the first LEED Platinum Children's Hospital in the World by the U.S. Green Building Council. There are only 119 Platinum level buildings around the country. This one is one of those buildings that will serve as a prototype of building design, construction and operation. One will see what Dell has learned in the new LEED for Healthcare Rating System to be released for pilot later this year. Connecting the green-building dots between evidence-based design and evidence-based medicine is a huge step in the right direction.

See http://www.seton.net/locations/dell_childrens/ for more.

Attebury Grain Storage Facility Added to Superfund List

EPA has added the Attebury Grain Storage Facility to the National Priorities List (NPL) of Superfund sites, the EPA and the Texas Commission on Environmental Quality (TCEQ) announced on April 8, 2009. Located in Happy, Texas, the facility is the site of a plume of contaminated ground water caused by carbon tetrachloride and other solvents in concentrations above safe drinking water maximum contamination levels.

Probable cause of the groundwater's contamination is the use of carbon tetrachloride to extinguish a fire when the grain storage facility burned in 1962. The City of Happy closed municipal well No. 3 due to the contamination in 1991 but recent tests by the TCEQ have shown that other privately owned wells are contaminated now also.

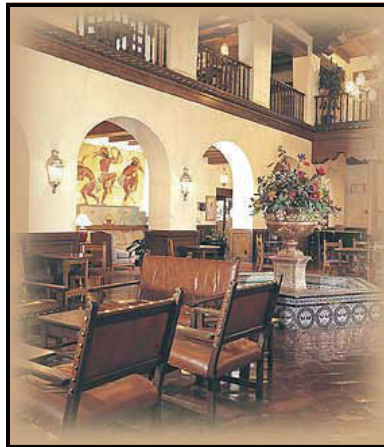


The **National Priorities List** is the list of hazardous waste sites in the United States eligible for long-term remedial action financed under the federal Superfund program. As of April 9, 2009 there are currently 59 sites listed on the NPL in Texas, of which ten (10) have been deleted, and 2 are proposed. The addition of this site to the Superfund list makes federal dollars available, allowing EPA and the TCEQ to speed cleanup.

To see a complete list of NPL Sites in Texas:
<http://www.epa.gov/superfund/sites/npl/tx.htm>

Historic “La Posada de Albuquerque” **Now “Hotel Andaluz” Goes For** **LEED Gold**

The grand 1930's hotel, La Posada de Albuquerque, is temporarily closed for renovations and remodeling. The reopening is scheduled for June of 2009 under the name of Hotel Andaluz. What makes this particular remodeling unique, however, is the hotel developer's plan to apply for a LEED Gold certification. If approved, the hotel will be the only LEED certified hotel in the state of New Mexico. Not only will it reopen as a historic, boutique hotel with ambience, style, grace and comfort, it will be an example of the environmental direction the United States Green Building Council (USGBC) and the Environmental Protection Agency (EPA) hope many other construction projects will take.



What is LEED®?

The Leadership in Energy and Environmental Design (LEED) Green Building Rating System encourages and accelerates global adoption of sustainable green building and development practices through the creation and implementation of universally understood and accepted tools and performance criteria. The rating systems can apply to new construction, existing buildings (operations & maintenance), commercial interiors and to many types of buildings and projects. This certification program is the nationally accepted benchmark for the design, construction and operation of high performance green buildings. Architects, real estate professionals, facility managers, engineers, interior designers, landscape architects, construction managers, lenders and government officials all use LEED to help transform the built environment to sustainability. State and local governments across the country are adopting LEED for public-owned and public-funded buildings. LEED certification applies to many types of project profiles and is based upon a point system from basic LEED certification up to Gold, Silver and Platinum. For further information see: <http://www.usgbc.org/>.

“Santa Fe Renewable Energy Conference”

The “Brown to Green: Make the Connection to Renewable Energy” conference held in Santa Fe on December 10 and 11, 2008 was to bring together interested parties and stakeholders on the opportunities and obstacles for siting renewable energy projects on contaminated land. Workshop attendees heard from many distinguished and expert speakers about renewable energy development — which included alternative energy sources like wind turbine, biomass, solar and geothermal. Also workshop attendees heard about recent private development progress, new government policies, regulatory issues, collaborative efforts among Federal, State and local government agencies and private industries that affect and/or impact development of renewable energy. Last, but not least, workshop attendees learned about current renewable energy development successes, new projects in the works, potential funding incentives, and suggestions to assist with future funding. Overall, participants and leaders at the conference were enthusiastic about the future of green power projects in this environment of increasing demand. The pictures below are from the Nellis AFB, Nevada Solar Power System, the largest photovoltaic array in America.



Aerial View of the Solar Array after Construction Completion



Non-invasive concrete foundations are cast



Tripod trackers are installed

“Renewable Energy on Tribal Lands”

The Renewable Energy Conference in Santa Fe presented, among other topics, how Tribal Lands in New Mexico are benefitting from the development of new technology, incentives available and new projects taking place. Because many residences are in remote areas, thousands do not have electricity available. Sacred Power Corporation is installing systems on low cost HUD housing. Solar carports (pictured below) provide opportunities for power to homes and plug-in capabilities for electric cars to them. Accessing transmission lines is often difficult, but the solar panels being installed are low maintenance.

Sacred Power Corporation Green Development in Native Communities

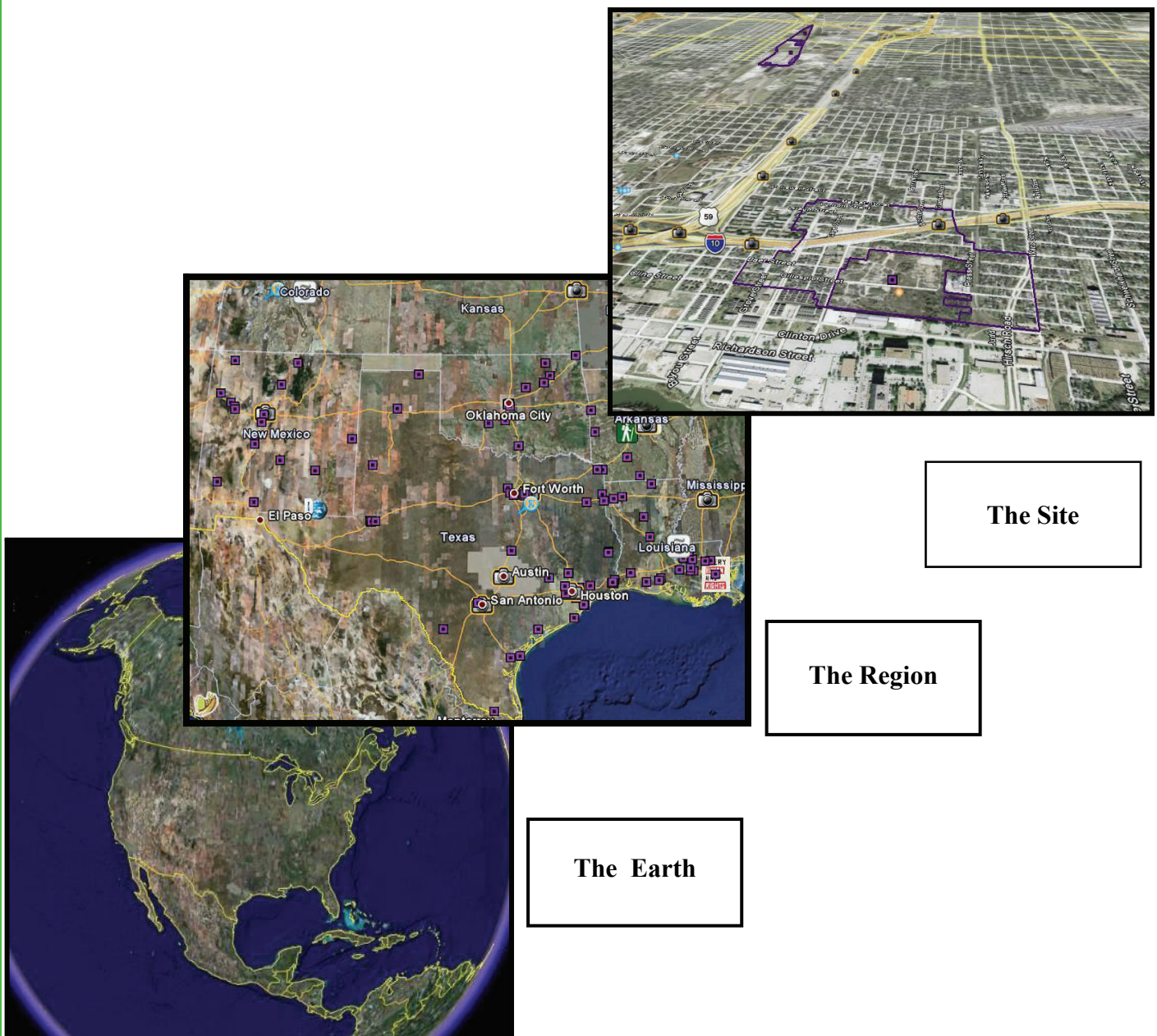
Grid-Tie Solar Carports



Sacred Power Corporation is also working with companies to provide telecommunication power units for their sites, as well as water pumping units.

Region 6 Launches Google Earth Public Access to Land Revitalization Sites

A convenient tool is being made available to the public to visually locate EPA sites on the internet. Through the “eyes” of Google Earth, Region 6 Brownfields, Superfund National Priorities List sites, Resource Conservation and Recovery Act (RCRA) hazardous and non-hazardous sites can be found. A satellite view of the properties with property boundaries, basic information pop-ups, and links to fact sheets are included. New sites and additional pictures will be added as they become available. This should be a valuable information tool for all interested parties. For instructions on how to access this free information, see the Google Earth link under Region 6 Land Revitalization Resources in the box on the right-hand side of the home screen.



Region 6 Publishes a “Green Pages Guide”

Check out the new “Green Pages Guide”, a directory of EPA programs that support or assist with efforts to address climate change. Now available online for easy access, one can learn about the dozens of EPA voluntary green partnership programs. Entitled ***Clean Energy & Climate Change Programs***, the goal is to

**Clean Energy &
Climate Change
Programs**

enhance and facilitate business, governmental agency, or nonprofit organization knowledge of and participation in the Eco-Challenge Network. Each of the national or regional programs or initiatives has a brief description, a regional contact person and a web site for more information.

Another unique feature is the matrix of programs with cross-references to business and industrial sectors. By following the sector most like your facility, you can locate programs that best align with your business. All of the programs have benefits to reduce waste, to improve efficiency and to initiate a positive climate change.

The **Green Pages Guide** is available in both [Letter](#) (PDF—24 pp, 4942K, [About PDF](#)) and [booklet](#) (PDF—12 pp, 2130K,) formats.



If you have an article or calendar event you would like to have considered for this website please email:

Cornell.Douglas@epa.gov
