

## DBS&A Receives Grant for Arsenic Removal Research

Daniel B. Stephens & Associates, Inc. (DBS&A) of Albuquerque, in association with Subsurface Technologies, Inc., was recently awarded a U.S. Environmental Protection Agency (EPA) Small Business Innovation Research grant to test innovative arsenic treatment technologies. The \$100,000 grant will enable Dr. Gregory P. Miller, Senior Geochemist at DBS&A, to conduct a full-scale, on-site demonstration of subsurface arsenic-reactive barriers. The technology, referred to as Subsurface Treatment for Arsenic Removal (STAR), is based on modifications of proven subsurface (in-situ) iron control technology. On-site demonstration at the San Antonio, New Mexico well field will facilitate analyses and optimization necessary to make this technology commercially available to water systems seeking to comply with the EPA's recently revised standard for arsenic in drinking water.

STAR offers significant advantages over conventional above-ground treatment technologies in that it does not require the construction of above-ground facilities; generate large volumes of waste sludge, brine, or spent treatment media requiring disposal; or require a skilled operator to maintain the system. These advantages position STAR as a cost-effective option for both small community water systems and large municipal providers.

Dr. Miller has conducted dozens of studies on chemical mobility in aquifers and is an expert on geochemical barriers. Subsurface Technologies is a leader in subsurface microbiology and large municipal production well maintenance programs. They have successfully implemented the subsurface iron treatment technology upon which STAR is based at over 50 sites around the world. Subsurface Technologies has been working with this technology for more than 30 years.

Contact Dr. Gregory P. Miller at [gmillers@dbstephens.com](mailto:gmillers@dbstephens.com) or (505) 822-9400.

## Regenesis Receives Patent on Hydrogen Release Compound (HRC®)

Regenesis, based in San Clemente, California, was recently granted a patent for its Hydrogen Release Compound (HRC®). HRC is a proprietary polylactate ester used for the purpose of accelerating reductive bioremediation processes that degrade chlorinated contaminants, nitroaromatics and oxyanions in groundwater and saturated soils. HRC also has the capability to remove certain metals from the subsurface through the facilitation of precipitation reactions.

According to the company, a time-release feature of HRC allows relatively low concentrations of hydrogen to be released slowly, for periods of one to two or more years, optimizing biodegradation rates. The slow, low-concentration release of hydrogen may also prevent unwanted buildup of potentially dangerous gases, such as methane, in the subsurface.

HRC is applied with direct-push injection, and has been used on more than 350 sites in the United States. According to Regenesis, HRC is effective on contaminants ranging from PCE and explosives to chromium and perchlorate.

Visit <http://www.regenesis.com/>

## Cadiz Storage Project Vetoed by Metropolitan Water District

On Oct. 8, the board of the Metropolitan Water District (MWD) of California elected to forego the Cadiz Water Storage and Supply Project. This decision came just over a month after the U.S. Department of the Interior gave its final approval on the project. According to a press release by the MWD, the action was taken because of dramatically changed conditions on the Colorado River, making it unlikely that there would be sufficient surplus water to store as the proposed program anticipated in the near-term.

Visit [www.mwd.dst.ca.us/](http://www.mwd.dst.ca.us/)

## Knight-Piesold Quantifies Southwestern Water's Colorado Reserve

Southwestern Water Exploration Company's engineering consultants, the firm of Knight Piesold, has completed its full review of the large fresh water reservoir discovered deep underground in Colorado. The Knight Piesold estimate is that the Southwestern Water reservoir contains at least 300,000 acre-feet of water. The reservoir can produce, according to the same engineering analysis, 3,000 to 6,000 acre feet of water per year, enough to supply the water needs of a town of around 10,000 people. At this rate of production, the Southwestern Water reservoir will last for a minimum of 100 years.

The price of water in this region of Colorado is currently averaging \$15,500 per acre-foot for Colorado Big Thompson (CBT) delivery.

To bring this reservoir more rapidly into production, Southwestern Water has retained the services of independent water appraisers and water brokers to sell the production on an annualized basis.

Southwestern Water is also now actively investigating the potential of two additional aquifers the company has located underground in Colorado. These are expected to contain deposits of fresh water similar or greater in size to the discovery in early 2002.

In addition, Southwestern Water also recently completed a private placement of 100,000 shares of its treasury stock (Rule 144) at a price of \$1.50 per share. The purchaser also received warrants to purchase an additional 600,000 shares at \$2.50 per share over the next three years. These funds will go toward Southwestern Water's planned development of a large underground water aquifer in south Texas.

Contact Steven Misner or Thomas Lenney at (800) 661-9169 or [www.southwesternwater.com](http://www.southwesternwater.com)

## Clear Creek Associates Moves to Tucson Landmark

Clear Creek Associates, an Arizona hydrogeologic consulting firm, has expanded its Tucson office space in the city's downtown area. Founding partners Doug and Lori Bartlett, along with Tucson

office manager Mike Alter, invested in a bit of old Tucson history by purchasing the landmark Old Stork Building (sometimes referred to as “the Stork’s Nest”), in the El Presidio Historic District. The adobe building was reportedly built in 1882 as a private residence and acquired its present-day name in 1922 after one of

its former owners turned it into Tucson’s first maternity ward. It remained a maternity ward until 1945. Clear Creek moved into the new quarters on 221 North Court Avenue in late August.

*Visit [www.clearcreekassociates.com](http://www.clearcreekassociates.com)*