



### 3<sup>rd</sup> ANNUAL ARSENIC WATER TREATMENT TECHNOLOGY VENDORS FORUM and THEME SESSION

November 2-3, 2005

in collaboration with the

### 10<sup>th</sup> ANNUAL NEW MEXICO ENVIRONMENTAL HEALTH CONFERENCE

Sheraton Old Town Hotel, Albuquerque, New Mexico

October 30 - November 3, 2005

**Summary:** The 2005 New Mexico Environmental Health Conference will host three activities related to implementation of the new standard for arsenic in drinking water. On November 2, a half-day technical theme session will be devoted to results of the Arsenic Water Technology Partnership research, pilot demonstration and outreach programs as well presentations related to implementation of the new Arsenic Standard in New Mexico. The theme session will be followed by a half-day workshop that will provide an opportunity for vendors of innovative water treatment technologies to describe project histories that demonstrate the effectiveness of their products. Vendors will be invited to participate in a closed session on November 3, in which technical review teams will evaluate the suitability of proposed treatment technologies for pilot studies sponsored by the Arsenic Water Technology Partnership. Technologies will be evaluated for possible use in pilot demonstrations to be conducted at community sites starting in 2006. Vendors will also be able to set up display booths at the Conference Exhibit Hall for the duration of the conference.

**Background:** The **Arsenic Water Technology Partnership** program is a multi-year program funded by a congressional appropriation through the Department of Energy. The program is designed to move technologies from the bench-scale to demonstration, with assistance being provided to utilities on implementation. This program will enable water utilities, particularly those serving small, rural communities and Indian tribes, to implement the most cost-effective solutions to their arsenic treatment needs. This goal will be met by accomplishing three objectives: 1) conducting research and developing innovative arsenic removal technologies with a focus on reducing energy costs, minimizing operating costs, and minimizing quantities of waste; 2) demonstrating the applicability of these technologies to a range of water chemistries, geographic locales, and system sizes; and 3) evaluating the cost effectiveness of these technologies and providing education, training, and technology transfer assistance to the user communities. The Awwa Research Foundation (AwwaRF) manages the bench-scale research programs. Sandia National Laboratories (SNL) conducts the demonstration program. WERC (A Consortium for Environmental Education and Technology Development) evaluates the economic feasibility of the technologies investigated and conducts technology transfer activities.

#### ***New Vendor Focus for 2005:***

In addition to arsenic removal methods, this year, we encourage vendors of technologies suitable for simultaneous removal of arsenic plus other contaminants to participate. Other contaminants of concern include: nitrate, perchlorate, uranium and radium.



Pilot Test System in Socorro, NM

**Pilot Demonstration Program:** Sandia National Laboratories will have three pilot treatment demonstrations in operation by November 2005 and will initiate three additional demonstrations in 2006. These will include demonstrations in existing pump houses, demonstrations using portable skid-mounted units and a demonstration using a mobile treatment trailer. Technologies will be chosen to provide a broad cross-section of treatment processes. The classes of technologies currently recognized include: 1) Continuous flow (ion exchange, metal oxyhydroxides sorbents); 2) Batch (Coagulation/filtration); and 3) Reverse osmosis. Other types may be recognized as the project matures based on vendor responses and the results of the technology development program led by AwwaRF. Waste characterization procedures and disposal costs will also be considered in technology selection. Pilot communities and technologies will be matched to examine a wide range of alternative technologies and site conditions. Pilot communities will be chosen based on a number of criteria including water chemistry (concentrations of competing anions, solids content, redox), choice of distributed vs. Point-of-Use systems, access and permitting scenarios, local assistance, and socioeconomic factors.



Innovative treatment technologies for distributed systems and Point-of-Use systems will be evaluated in the pilot demonstrations.

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*For questions and more information on how to participate in the Theme Session and Vendors Forum, log-on to the Arsenic Pilot Demonstration Program website:*

**[www.sandia.gov/water/arsenic.htm](http://www.sandia.gov/water/arsenic.htm)**

*For more information about the New Mexico Environmental Health Conference, log-on to conference website: **[www.nmehc.net](http://www.nmehc.net)***

*For more information about the Arsenic Water Technology Partnership, log-on to the AWTP website: **[www.arsenicpartners.org](http://www.arsenicpartners.org)***

*Partnership Contact and Theme Session Chairman:*

**Malcolm Siegel**, Arsenic Technology Demonstration Project Manager, Sandia National Laboratories, Albuquerque, NM 87185-0754, Phone: (505) 844-5426, FAX: (505) 844-7354, E-mail: **[msiegel@sandia.gov](mailto:msiegel@sandia.gov)**

*Vendor Forum Contact:*

**Paul McConnell**, Sandia National Laboratories, Albuquerque, NM 87185-0719, Phone: (505) 845-8361, FAX: (505) 844-0244,

E-mail: **[pemccon@sandia.gov](mailto:pemccon@sandia.gov)**