

EPA Provides Groundwater, Remediation, and Perchlorate Information

Three new information sources are available from the U.S. Environmental Protection Agency (EPA), including an Internet-based groundwater information site, a technology status report on soil and groundwater remediation, and a Web page containing information about perchlorate remediation.

The EPA's Groundwater Remediation Technologies Analysis Center (GWRAC) launched **Groundwater Central**® which contains a resource links database and several integrated communication components. The smart search engine provides a one-stop shop to browse for a wide variety of information, from on-line publications to case studies, data repositories, vendors, and announcements for events. Communication center components integrated into Groundwater Central include a public discussion forum, public events calendar, and a chat room. For more information, visit <http://www.groundwatercentral.info>.

In January, EPA released the **Technology Status Report: Treatment Trains for Remediation of Soil and Groundwater (TS-03-01)**. This 167-page report was produced by the GWRAC. It includes an appendix that contains 48 case studies where treatment trains were used to remediate groundwater or soil, either in situ or ex situ. For the purposes of this document, a treatment train was defined as the sequential use of unique remediation technologies to treat the same volume of contaminated soil or groundwater. Several summary tables and figures were generated from the compiled information, and interpretive text is provided. View or download the full report at http://www.gwrac.org/pdf/train_full.pdf

The **Perchlorate Remediation Information Web page** is on the EPA's CLU-IN Web site. This page provides access to more than 40 technical reports,

journal articles, Web pages, and other materials from public and private sources. Representing the latest advancements in the research and application of perchlorate treatment technologies, these resources provide up-to-date information in a number of formats, including treatability studies, cost and performance reports, case studies, presentations, and peer-reviewed literature. View and download the perchlorate remediation resources on CLU-IN at <http://clu-in.org/perchlorate>.

EPA Report Aids Compliance with Bioterrorism Act

Article originally appeared on Water Tech Online, Feb. 28, 2003

The U.S. Environmental Protection Agency (EPA) has provided a detailed 23-page on-line report giving instructions to assist community water systems in complying with the Bioterrorism Preparedness and Response Act of 2002.

The report includes a section with frequently asked questions, a chart of key compliance deadline dates, steps for getting security vulnerability assessments certified, and even mailing labels for courier deliveries of items submitted to EPA.

Under the Bioterrorism Act, all community drinking water systems that serve more than 3,300 people are required to certify and submit vulnerability assessments and certify completion of emergency response plans to EPA. The deadline to certify and submit these assessments was March 31 for drinking water systems serving 100,000 or more people, and is Dec. 31 for systems serving 50,000-99,999 people and June 30, 2004 for systems serving 3,301-49,999, said the EPA.

Systems are required to certify completion of an emergency response plan within six months of submitting a vulnerability assessment, said the agency.

The EPA report is available at www.epa.gov/safewater/security/util-inst.pdf.

Visit www.watertechonline.com

EPA Settles with Union Pacific for CA Wetlands Violations

The U.S. Environmental Protection Agency (EPA) recently reached a settlement with Union Pacific Railroad that requires the company to pay \$125,000 for alleged wetlands violations at two Santa Barbara County, Calif. waterways in the 1990s.

Union Pacific paid \$55,000 for illegally discharging dredged materials into Carpinteria Salt Marsh during a project in 1997, and another \$70,000 for similar violations in 1999 at Laguna Creek.

"Railroad tracks cross some of the most sensitive natural areas in California," said John Kemmerer, acting director of the EPA's water division in San Francisco. "Union Pacific has already restored the damaged wetlands and has taken administrative steps to prevent such mistakes in the future." He expressed hope that the penalties assessed for these Clean Water Act violations will deter others from damaging important natural resources.

Union Pacific failed to obtain a federal permit for trenching, dredging and filling activities in 1997 that damaged a portion of the 230-acre Carpinteria Salt Marsh, nearly half of which functions as a research and wildlife reserve run by the University of California Santa Barbara.

During the fall of 1999, the company also discharged dredged and fill materials into Laguna Creek without a federal permit as part of a bridge replacement project.

People wishing to place fill materials into wetlands, rivers, streams, and other waters of the United States must apply to the U.S. Army Corps of Engineers for a permit. The EPA works with the Corps of

Engineers to evaluate the permits, requiring applicants to provide the least environmentally damaging alternative possible.

Visit www.epa.gov/region09/

ADWR Project Focuses on Rural Water Affairs

Joe Gelt, Editor – Water Resources Research Center, University of Arizona

Rural water concerns are attracting increased attention in Arizona, and an Arizona Department of Water Resources (ADWR) study is one further indication of that growing interest. ADWR's Rural Water Resources Study will examine the availability of water supplies for future municipal and industrial growth and the ability of communities to withstand the effect of long-term drought. Other issues to be addressed include identifying conservation activities, impacts of exempt wells – those with less than 35 gallons-per-minute pump capacity – and effectiveness of current water management practices. The project involves collecting water-related information from varied sources and compiling a database and report.

Project Director Kathy Jacobs says the project is made up of several phases, with phase one consisting of mailing out questionnaires. Three sets of questionnaires will be sent out, with one set delivered to about 1,200 water companies outside Active Management Areas (AMAs), another set to planning directors of counties and tribes, and a third set going to incorporated jurisdictions,

such as cities and towns outside AMAs.

Jacobs says that with information obtained from the survey, "We will have a much better idea of the types of problems that exist and how consistent the problems and issues are across the state. We will be able to assess the level of drought concern and the types of assistance communities want from the state."

Jacobs adds, "We want to reassure people that the survey information is not being collected for regulatory purposes. It is imperative that we get a good response to ensure that our database of issues and concerns is relatively complete. We are anxious for people to fill out the questionnaires." The key to the success of the project will be gathering as complete information as possible to ensure that community concerns are identified and future water supplies determined.

Jacobs says the risk and vulnerability of rural communities will be examined to better prioritize the issues. Strategies that have been adopted or are under consideration in individual communities will be shared with other groups if it appears that the strategies might be helpful. In considering possible outcomes, Jacobs says, "We will probably be looking at an array of tools and new information to address the multiple issues across the state. Also, the project will be providing input to state Representative Tom O'Halleran, who is conducting workshops and meetings throughout the state to collect information and boost interest in rural water issues."

Jacobs intends to have a status report completed by June, followed by a period of public comment, then a final report done in the fall. The planned result of these coordinated activities is to develop potential solutions to the water problems of rural areas, which would lay the groundwork for a possible legislative agenda coordinated by O'Halleran and presented next year.

For additional information about the Rural Water Resources Study, contact Kathy Jacobs at kljacobs@adwr.state.az.us

AZ/NV Interstate Water Banking Update

The Arizona Water Banking Authority (AWBA) approved and signed two agreements in December, thus completing the federal process necessary to store water on behalf of Nevada and create unused apportionment for the state's benefit.

The Storage and Interstate Release Agreement with the Central Arizona Water Project (CAP) and the Agreement for the Development of Intentionally Created Unused Apportionment with the Southern Nevada Water Authority, the Colorado River Commission of Nevada and the Bureau of Reclamation were the last two agreements required by a federal rule regarding off-stream storage of Colorado River water.

The AWBA was created by the Arizona State Legislature in 1996 to identify means to store unused portions of Arizona's allocation of Colorado River water to meet future needs. Without the AWBA, Arizona would not have used its full allocation until 2030. Most of the approximately 14 million acre-feet of water unused until that time would have gone to Southern California.

In spite of the previously outstanding agreements, Arizona began storing water for Nevada in the early 1990s. The total amount of water stored in Arizona by the AWBA and CAP on Nevada's behalf is now more than 116,000 acre-feet, which is almost 40 percent of Nevada's annual allocation of the Colorado River.

The agreements are on the AWBA Web site at www.awba.state.az.us

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California Arsenic Standard May Become More Stringent Than EPA Limit

From article originally appearing on Water Tech Online, March 10, 2003

California environmental officials released a preliminary public health goal for arsenic in drinking water on March 7, recommending a level far below the federal standard that already has many states and communities complaining.

The Los Angeles Daily News reported that the California Environmental Protection Agency, through the Office of Environmental Health Hazard Assessment, proposed a limit of 4 parts per trillion for arsenic in drinking water. The current arsenic standard in California and the nation is 50 parts per billion (ppb), but drops to 10 ppb in 2006.

A draft public health goal will be used by state officials in creating a drinking water standard for arsenic, a naturally occurring carcinogen, and the standard will set the maximum allowable level of arsenic in drinking water.

“While the U.S. Environmental Protection Agency has lowered the federal arsenic standard from 50 parts per billion to 10 parts per billion, effective January 2006, California has traditionally led the nation with stricter water quality standards,” said Jill T. Wicke, water system operations manager for the Metropolitan Water District of Southern California.

She said the California Department of Health Services (CDHS) is required to either accept the federal standard or use a lower value. CDHS is required by state law to set this standard by June 30, 2004, with compliance monitoring to start by January 2006.

For complete article, visit www.watertechonline.com

California Considers New Restrictions on Open-Pit Gold Mining

On March 1, *The Associated Press (AP)* reported that the California State Mining

and Geology Board has proposed regulations that would require mining companies to refill all new open-pit metal mines and provide financial guarantees to protect taxpayers in the event of the company defaulting. These new regulations would be the nation's toughest restrictions on open-pit gold mining, according to *AP*.

AP stated that the proposed regulations were praised by environmental groups such as Great Basin Mine Watch and the National Parks Conservation Association. Alternatively, representatives from the mining industry said the regulation would effectively ban mining in the state because of the high costs involved in compliance, *AP* said.

State law already requires that mined areas be returned to a usable condition, and that public health and safety problems be eliminated, reported *AP*, but the mining board now says the stricter backfill regulations are needed to meet the goals of that law.

According to *AP*, the emergency regulations were prompted by Glamis Gold Ltd.'s proposal to mine federal land near the Fort Yuma Reservation of the Quechan Indian tribe near Winterhaven, on what the tribe considers sacred land. The mine could leave an open pit 4,700 feet by 2,700 feet, and 800 feet deep, along with piles of waste rock a mile long and up to 300 feet high, *AP* reported.

New Mexico Officials Stress Need for State Water Plan

Article originally appeared on Water Tech Online, March 3, 2003

New Mexico officials hope a proposed water plan – the first statewide blueprint for attacking New Mexico's water problems – will put an end to some in-state fighting over water rights.

Estavan Lopez, chairman of the Interstate Stream Commission, and John D'Antonio, a state engineer, have been before state House and Senate subcommittees on numerous occasions explaining their plan in conjunction with other water

legislation, the *Las Cruces Sun-News* said.

One of the first steps will be determining exactly how much water the state has.

“New Mexico needs to begin to set aside very substantial sums to deal with the problems,” D'Antonio said, according to the paper. “The state will have to plan very carefully and creatively, both technical and financial aspects of projects, seeking federal, state, local, tribal, and private funds whenever possible.”

D'Antonio and Lopez told legislators there are three sources of water in New Mexico – rivers, aquifers, and precipitation – but that water is in short supply and that supply is being threatened. According to the article, officials said the survival of both urban and rural New Mexico depends on a stable and predictable supply of water.

The costs for coming to grips with the water plan are intimidating, the newspaper said. The plan carries an estimated price tag of \$2.3 billion, including:

- \$1.6 billion to current water supply systems either planned or in progress.
- \$220 million to rehabilitate 38 flood control dams by 2010.
- \$375 million to reach compliance with the federal guidelines on reducing arsenic levels in New Mexico's water.
- \$100 million to create or maintain critical habitats for New Mexico's wildlife.

A proposed bill in the state House would give \$1.3 million to increasing technical expertise and manpower – engineers, hydrologists and surveyors – to gather information and get a database up and running.

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