



Quantum Environmental & Engineering Services, LLC

*Committed to
community enhancement,
smart development and
environmental stewardship.*

Proposed Ground Water Classification Rule Changes Serve Broad Interests

Ground water in Tennessee is an abundant and important resource deserving protection and balanced management for us and our future generations. The State of Tennessee Department of Environment and Conservation enacted Rules for Ground Water Classification in January 2004. The intent was to bring consistency to the programs and a classification system based on ground water characteristics and uses like the one used for classifying surface water.

Currently, TDEC is proposing to amend the Rules for Ground Water Classification. Significant amendments are meant to: **1.)** clarify classifications, **2.)** provide opportunities for better protection of sensitive perched ground water systems (i.e., in caves), **3.)** promote public and private use of classifications to efficiently manage historically contaminated ground water, **4.)** provide administrative processes for TDEC to implement these with public input, and **5.)** institute a requirement to report contamination to TDEC.

The proposed changes are positive because they represent a logical and progressive effort to bring consistency, process and proactivity to managing ground water resources. The changes enhance the ability to control pollution within the context of existing TDEC programs and infrastructure. Further, the amendments are fair and support both resource conservation and sustainable economic development interests. The rule changes are soon to go before the Water Quality Control Board for rule making, and it is likely that some interests will oppose the TDEC reporting requirement.

The amendments recognize the ecologically sensitive and economically important nature of ground water in cave systems by allowing designation of individually-tailored water quality criteria goals when the necessity can be demonstrated. In the long run this will serve the interests of conservation as well as development of tourist and recreation businesses where these resources

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Recycling Saves



As consultants to both the State of

Tennessee and others who make use of State monies from the underground storage tank cleanup Reimbursement Fund, QE² is keenly aware of the need to conserve. Limited resources dictate fiscal prudence, smart planning and efficient implementation. One of QE²'s leading strategies to wisely manage State resources is to recycle remediation equipment from previously remediated sites to hold down costs on new cleanups. QE² recently upgraded an existing remediation system at the TDOT Regional Garage in Hamblen County. The upgrade, initiated under

a DUST-approved Corrective Action Plan, was conducted to accelerate the cleanup process. Approximately 85% of the equipment installed during the upgrade was recycled from other sites where their service was no longer needed. Reused items included a soil vapor extraction unit, shallow tray air stripper, electrical controls, transfer pumps and holding tanks. Using the recycled equipment saved the State something in excess of \$20,000 worth of capital expenditures. This application extends the resources of TDOT and can also be used likewise to extend the resource of the UST reimbursement fund. ■

Groundwater (continued)

occur, which is often in some of Tennessee's most economically challenged areas.

The amendments provide a classification entitled "Site Specific Impaired Ground Water". The classification allows historically contaminated ground water to be managed in place without remediation provided that it can be proven safe and unthreatening to adjacent ground water resources. Industry and government can then use and reuse these properties for commercial and industrial purposes without the unnecessary expense of ground water remediation. Remediation dollars can then be spent elsewhere as it makes most sense for private interest or public protection, which in turn encourages efficient land use and provides incentive for redevelopment.

TDEC's proposed changes to the Rules for Ground Water Classification bring better balance and efficiency to managing ground water resources. Greater protection can be afforded to rare, pristine, and economically important ground water in cave systems. The Rule changes encourage smart, proactive resource management rather than management only in reaction to contamination that has already occurred. The ability for existing contamination to remain safely in place without remediation is sensible and doesn't unnecessarily burden the public or the industries that end up paying the price. At the end of the day, the broad interests of both public and private sectors and conservation are served in a balanced way. Details can be viewed on the TDEC web site. ■



Employee Highlights

Quantum Environmental & Engineering Services, LLC management extends its congratulations to **Helen S. Hennon, P.E.** and **Alan Khonsari**, who were recently promoted to new positions as Senior Directors of the Environmental and Civil Engineering departments, respectively. QE² provides environmental planning, permitting, assessment, remediation and a variety of civil site design and development services. These include project funding / feasibility assessments that can lead to grant and low-interest loan funding for infrastructure development. Ms. Hennon, a QE² veteran of over 13 years, has progressively worked her way up to Sr. Director Environmental Services from the intern position she held while finishing graduate school. She is a member of the State of Tennessee Air Pollution Control Board and participates in numerous public forums on air quality. Mr. Khonsari came to QE² in the late 1990's to lead the materials and construction testing business unit. Since then he has demonstrated broad business development skills and management savvy. Mr. Khonsari ascribes to disciplined thinking in business leadership and trains executives and professionals on the concepts throughout East Tennessee and Virginia. He has served as interim manager of the Civil Engineering department during the past year, and his promotion is in recognition of his effective leadership. Our hats are off to both Helen and Alan as they transition into their new positions. ■



Alan Khonsari



Helen S. Hennon, P.E.



QE² is pleased to announce the latest addition to our design team, Harry Alexander. A veteran of the local business and technical community, Harry brings to QE² a wealth of expertise in the environmental engineering business. He is a licensed Professional Engineer in eleven states and has consulted to major industrial and municipal clients throughout the U.S. His experience includes all aspects of air and water permitting, water distribution, wastewater conveyance, and wastewater treatment systems. He is author of numerous technical publications including the *Environmental Regulations Encyclopedia* (© 1997).



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