



ARKANSAS DRINKING WATER UPDATE

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ENGINEERING SECTION – DEPARTMENT OF HEALTH

Fall 2008

Continuation of State backed bonds for water projects on November ballot

Arkansas voters will have the opportunity in the November 4th election to decide on Referred Question 1 which allows the Arkansas Natural Resources Commission (ANRC) to issue up to \$300 million in state backed, tax free bonds. The bonds would permit water and sewer utilities in the state to obtain low interest loans for construction projects, and would also include drainage, irrigation, flood control, and wetlands projects.

A similar authorization for bonding authority by ANRC was passed by Arkansas voters in 1998 and has been a critical source of financing for water and wastewater utilities in the state. However, that authority is running out based on the original cap of \$300 million. Referred Question 1 would authorize an additional \$300 million in bonds and extend the program for ten more years.

Voters should understand that the current and proposed bonding programs are not a tax. The bonds are paid off by ratepayer revenue from the individual city, county, or utility which borrows money from the program. However, the rates paid by those customers are usually less because the bonds are backed by the state of Arkansas resulting in a lower interest rate than could be realized by most utilities on their own.

The ballot proposal would limit to \$60 million the total principal that could be issued during any two-year budget cycle and would cap financing for irrigation projects at \$100 million. The bond money can also be counted as the state match for federal programs for water and sewer projects, including the Safe Drinking Water Act Revolving Loan Fund.

Question 1 is one of three ballot measures referred to voters in the 2008 election by the Arkansas Legislature. The measure has been endorsed by a wide array of groups including Governor Mike Beebe, Arkansas Rural Water Association, Arkansas Municipal League, Arkansas Environmental Federation, Arkansas Electric Cooperatives Corporation, and Farm Bureau. More information on Question 1 can be obtained by contacting Mike Chandler with the Arkansas Natural Resources Commission. ♦

Total Coliform Rule changes proposed by advisory group

A committee of representatives from drinking water stakeholder groups has proposed to the Environmental Protection Agency significant revisions to the agency's Total Coliform Rule (TCR). EPA formed the Total Coliform Rule Distribution System Advisory Committee (TCRDSAC) in 2007 and the group has met over a dozen times in the past year to hammer out a consensus document of recommended changes.

The most significant recommendation from the committee is to drop the current rule's reliance on a total coliform maximum contaminant level in lieu of a treatment technique, based on documentation that total coliform is not a public health threat.

The committee was charged by EPA to provide advice and recommendations on how the agency should revise the TCR while maintaining or improving public health protection. The group was also asked to identify what data needed to be collected and what studies or research conducted to better assess risks from distribution system contaminants. Even though the committee's function is advisory only, EPA has used feedback from similar stakeholder groups to shape other drinking water regulations.

See TCR page 2

Rockefeller Foundation report calls for comprehensive review of State water policies

A report commissioned by the Winthrop Rockefeller Foundation states that Arkansas is at a crossroads in the management of its water resources and that decisions made in the immediate future will either move the state towards the sustainable use of water or result in crisis management.

The report, *Water Issues in Arkansas – An Unfinished Story*, was released in September and was authored by private sector scientists.

In drawing its conclusions, the report solicited input via a survey of several hundred Arkansans as well as interviews with representatives of organizations and agencies involved with water resources. The report found overwhelming agreement among those providing input that water is vital to the state's long term growth and prosperity but also found that there is a widespread lack of knowledge and understanding by the public about water resources.

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The TCR is one of the oldest of the Safe Drinking Water Act regulations promulgated by EPA, and has not had a major revision since becoming final in 1991.

The TCRDSAC is made up of fourteen organizations and EPA. The recommendations of the committee are spelled out in an Agreement In Principle (AIP) document which EPA promises it will use as the basis for drafting a revised TCR regulation. Signing the AIP commits each organization to supporting the regulation if it is in accordance with the AIP.

The EPA timeline for a revised TCR is to issue a draft rule in 2010. More information on the TCRDSAC can be found at the EPA website:

www.epa.gov/safewater/disinfection/tcr/regulation_revisions_tcrdsac.html#members. ♦

Engineering Section 4815 West Markham, Slot 37 Little Rock, AR 72205

Some water systems continue to send correspondence to the old Department of Health & Human Services address (P.O. Box 1437, Little Rock, AR 72201). This address is not valid for the Department of Health. Water systems which continue to use the invalid address may have their submittals discarded.

Please use the correct address for all submittals to the Engineering Section. Your cooperation is appreciated.

ARKANSAS DRINKING WATER UPDATE is published quarterly by the Engineering Section, Arkansas Department of Health to inform readers of issues and activities affecting this industry. Articles and information in the newsletter can be reproduced without restriction if credit is given for the source. Potential contributors of articles for the **UPDATE** and persons wishing to be added to the mailing list should contact Robert Hart, P.E. at the return address listed on the last page.

Recommendations of the Total Coliform Rule / Distribution Systems Federal Advisory Committee*

Revised Total Coliform Rule (RTCR) Construct

- *E.coli* will remain a regulated contaminant with a zero maximum contaminant level goal and a maximum contaminant level.
- All fecal coliform provisions in the current TCR will be removed.
- Total coliform will be used as an indicator as part of a treatment technique to provide more comprehensive protection against fecal contamination.

MCL

- *E.coli* MCL is identical to the current TCR. An *E.coli* MCL also is proposed when a system fails to collect repeat samples following a routine sample that is *E.coli* positive.

Treatment Technique

- Treatment technique violation occurs when a system exceeds an action level trigger and fails to conduct the required assessment.
- Level 1 trigger consists of more than 5% of samples in the compliance period being total coliform positive (2 or more if < 40 samples/month), or failure to collect all required repeat sample following a positive sample.
- Level 1 assessment – a self assessment by the water system examining the system and its operational practices; submitted to the state within 30 days.
- Level 2 trigger is an *E.coli* violation, *E.coli* monitoring violation, or two Level 1 triggers within a 12 month period.
- Level 2 assessment – a more detailed assessment of the system and its operational practices. It is also a self assessment provided it is conducted by a certified operator with at least 2 years experience applicable for that grade of water system or higher, and must be submitted to the state within 30 days.

Monitoring

- Similar to the current TCR, baseline monitoring frequency will vary from quarterly to monthly based on state discretion, source type, and the population served.
- To be eligible for reduced compliance monitoring, in addition to state approval, a system must have had a sanitary survey showing it to be free of sanitary defects; have a clean TCR compliance history; and meet one of the following criteria: have an annual site visit by the state or a voluntary Level 2 assessment, correct any identified sanitary defect or have an approved plan and schedule to do so, have an approved cross connection control program, maintain continuous entry point disinfection and distribution system residual, maintain a 4-log inactivation of viruses each day per the Ground Water Rule, or other equivalent requirements approved by the state.
- Systems on reduced monitoring must begin monthly monitoring if they experience two or more monitoring violations in a 12 month period, an *E.coli* violation, trigger a Level 2 assessment, or a treatment technique violation.
- For any total coliform positive sample, three repeat samples are to be collected. One must be at the same site and the remaining two at sites identified in the sample site plan or by a standard operating procedure that best verifies and determines the extent of potential contamination. The current requirement to collect a minimum of five samples in the month following a positive sample would be dropped.

Analytical Methods

- The current 12 approved analytical methods for *E.coli* and total coliform are of different technology types and have different specificities and sensitivities. The Committee recommended that EPA evaluate all currently approved methods to determine whether they should continue to be appropriate for drinking water compliance monitoring.

* For brevity, this article is a partial listing of the requirements for community water systems only. The requirements for noncommunity systems are similar but not identical.

Rockefeller Report

continued from page 1

Among the negative trends in Arkansas identified in the report were increasing nonpoint source pollution, climate change contributing to droughts and floods, increased demands for drinking water and irrigation, poor development planning, major water infrastructure needs, and the use of litigation rather than collaboration in resolving issues.

Also identified among the factors contributing to the current status for water were inadequate laws and regulations, inadequate funding, and ineffective leadership and management.

In spite of these difficulties, the report proposes that the state is poised for success provided it becomes proactive and collaborative in identifying and implementing water management strategies. Eight policy areas were highlighted for attention with specific recommendations for each area.

1. Economic Incentives and Markets: determine the true cost of water, create voluntary or economic incentives, promote private-public alliances, and review untapped federal funding opportunities.

2. Integrate Surface and Groundwater Management: manage groundwater and surface water through one agency, revisit water allocations in federal projects, develop regional water management districts, create and protect infiltration zones, enact enforceable withdrawal regulations, revisit water use priorities, and encourage water conservation and reuse.

3. Integrate Point and Nonpoint Source Management: manage water quality through one agency, make data readily available, spotlight best management practices, and authorize pollutant trading practices.

4. Water Laws and Regulations: establish a commission to provide vision and guidance, establish a water code commission, revise the existing state water plan, and convene a water summit.

5. Participatory Process: document the different opinions on water resources, promote water programs, and work to build trust among stakeholders.

2008 Farm Bill – Potential Benefits to Water Utilities

Dan Smith, Geologist Supervisor

The 2008 Farm Bill (H.R. 2419) passed recently by Congress includes two programs that may potentially benefit drinking water utilities. The programs include the Cooperative Conservation Partnership Initiative (CCPI) and the Agricultural Water Enhancement Program (AWEP). Both programs are administered by the United States Department of Agriculture (USDA), National Resources Conservation Service (NRCS).

The purpose of the CCPI is to address conservation priorities on a local, state, multi-state, or regional level in efforts to protect land and water resources. The program focuses on encouraging agricultural producers (i.e. farmers or ranchers) to cooperate in meeting regulatory requirements, install/maintain conservation practices, and promotes development of innovative conservation practices. Those eligible to participate include local and state governments, institutions of higher education, producer associations, co-ops, and other non-government organizations.

The new AWEP is intended to promote ground and surface water conservation and to improve water quality on agricultural lands. AWEP is focused on encouraging agricultural producers to work collectively on water quantity and quality issues by leveraging federal resources. Those eligible for AWEP funding include agricultural producer associations or producers acting collectively, states, and units of local government. Details for implementing the new AWEP are not yet available.

Both the CCPI and the AWEP allow for agricultural producers to enter into partnerships with the USDA to implement conservation practices on agricultural lands. These conservation practices help to protect land and water resources and improve water quality. Since most water utilities do not own agricultural lands it may seem that tapping into these programs and resources would be impossible. However, water utilities may organize groups of agriculture producers within their watershed that are willing to implement these programs to conserve and improve water quality. These groups may then apply for funding from either the CCPI or the AWEP programs.

The bottom line is that activities within your watershed have an impact on the environmental quality of the water (both surface and ground). Improving water quality through cooperative conservation programs implemented by agricultural producers within your watershed will assist your water utility in protecting public health and reducing treatment challenges.

Funding is authorized at 6 percent of funds allocated for the other conservations programs under the 2008 Farm Bill - potentially \$530 million for the years 2008-2012. Currently, federal funding appropriations have yet to be established.

To find out more about the 2008 Farm Bill, CCPI, or AWEP programs and ways they may benefit your water utility, refer to the USDA Web site www.usda.gov/farmbill or the Natural Resources Conservation Service Web site www.nrcs.usda.gov/programs/ccpi. You may also access the 2008 Farm Bill in its entirety at the Library of Congress Web site <http://thomas.loc.gov/>.

6. Leaders and Champions: provide leadership training; identify community champions.

7. Public Awareness and Outreach: provide a single source of public information about water, declare a "Decade for Water", raise the awareness of water issues, educate schoolchildren, and promote a water stewardship ethic.

8. Adaptive Management: improve monitoring networks, utilize performance measures, and supplement with data from volunteer programs.

A copy of the report and a summary report can be found at www.wrfoundation.org/ . ♦

Sustainable Infrastructure Mapping Initiative [SIMI]

Raymond Thompson, P.E., Engineer Supervisor

Have you ever tried to find a shutoff valve at midnight? Has your most experienced operator retired and you cannot find your set of as-builts? Has a storm ever covered up areas in your distribution system and now you cannot find valves? Have you ever tried to coordinate with contractors but cannot tell them where the distribution system lines or valves are located? Have you ever heard of the terms GIS and GPS but not understood their meaning?

For water systems, GIS/GPS refers to a mapping system that begins with field staff locating the latitude and longitude of the system's assets (structures, valves, hydrants, etc.) with a global positioning system (GPS) unit capable of sub foot accuracy. That data is then imported into a geographic information systems (GIS) software program so that the water utility staff can see their assets located on map layers. The map layers can be USGS topographical maps, aerial maps or another map layer of your choosing. Once GPS coordinates are recorded for an asset, you will always be able to find it again in the field.

Some of the larger water systems in the state have already begun to use this technology. However, it may be beyond the scope of many of the smaller systems because of the cost or unfamiliarity with the equipment.

After Hurricanes Katrina and Rita hit the Texas, Louisiana and Mississippi coastal areas in 2005, it was obvious that most small or even large water utilities were not prepared for the consequences when major events like that happen. At the request of our technical assistance partner, Arkansas Rural Water Association, the Engineering began using the resources of our Capacity Development Technical and Operation contract to provide GIS/GPS installations in a few selected small water systems. The results were encouraging. The water utilities saw immediate benefits. Based on the success of these efforts, the Engineering Section decided to allocate some of our SRF set-aside funds to hire a mapping contractor

to help smaller water utilities begin a GIS/GPS mapping program for their system. The Section is in the final stages of awarding a contract with a mapping firm to do this work. Implementation should begin before the end of 2008.

So, how will the program work?

ADH Survey

Brad Jarrett, Capacity Development Coordinator for the Engineering Section, has mailed a survey form to all Arkansas small water systems. The form will capture some key information about your system. Based on the results of the survey, Brad will develop a priority list. Those systems at the top of the list will be given the

[GIS] Geographic Information System: a software tool to create water system maps.
[GPS] Global Positioning System: a device to collect the coordinates of a point – latitude / longitude.

opportunity of participating. The Section has a limited budget for this work and only a few systems will be selected to participate this year. Please take the time to complete the form and return it to Brad.

Pre-Assessment

If your water system is selected, the mapping contractor will visit with your staff and complete a review of your available maps and determine your mapping needs. The mapping contractor will then estimate what can be done with available funds targeted specifically for your water system. If approved by the Section, the contractor will proceed with the work.

Data Collection

Once a water system is selected, the first step is for the contractor to collect the data. The ability of the

contractor to do this data collection will depend on the willingness of the water utility to pre-locate all data points. In other words, the water utility must flag all valves to be located with the GPS unit before the contractor arrives. The water utility must be willing to pre-locate all fixed assets or the contractor will not be able to GPS the system.

Mapping

Once the field data collection is complete, the process of creating the maps can begin. The contractor will install GIS software on the water utility's computer (the utility must have a computer in order to participate in the program). The contractor then will migrate the field data to your computer and incorporate it with the GIS software. The contractor will then install available theme layers, such as aerial photographs, to your computer so that the utility can visually see the assets on the theme layers.

Training

After the contractor has completed the mapping installation, he will provide some initial training for the utility staff such that your staff can view, add basic data to the GIS and print maps.

The Division has limited funds to do this work. We will only be able to locate key assets during this initial effort. We can, by no means, develop a complete GIS/GPS system for every small water system or even for the selected ones that we will be assisting. However, the basis will be formed for the selected water utilities that desire to take control of their asset location and protection, to view this as a learning tool and see it as something that can be built upon for the future.

While there is no cost to the water systems to participate in the program, the utility must have some basic equipment such as a computer, and be willing to donate time to locate system assets.

For additional information, contact Raymond Thompson or Brad Jarrett with the Engineering Section. ♦

EPA 'CUPSS' program promotes asset management for small systems

The EPA has developed a free asset management tool for small water and wastewater utilities serving less than 1000 connections. The tool is called Check Up Program for Small Systems (CUPSS). Its goal is to help utilities move from crisis management to informed decision making, facilitate more efficient operations, and allow utilities to make the best use of limited resources.

CUPSS is available as a free download from the EPA's website or it can be ordered on a CD. The tool includes a workbook, user's guide, training manual, and promotional material.

Asset management is a buzzword in the water and wastewater industry that has received considerable attention in recent years. The term is loosely defined as managing existing infrastructure in order to maintain a desired level of customer service at an appropriate cost.

It can require considerable knowledge and skill to prepare and implement a comprehensive asset management program. For that reason, such fully developed programs have usually been seen only in large systems. However, every competent operator is used to employing the concepts of asset management on a day to day basis, whether he/she realizes it or not.

For example, when a pump fails a decision must be made to repair or replace the pump. Could the pump failure have been anticipated because of its age or telltale signs? What maintenance had been performed on the pump over the years? Who conducted that maintenance, when was it done, and what was done?

All of these questions and how they are answered are examples of asset management. The reason many small water systems don't have a formal program is that they haven't been provided the tools, or taken the time to

WATER SYSTEM IMPROVEMENTS

BARTON LEXA: treatment plant improvements including a new aerator, three new filters, and an additional high service pump increasing the treatment plant capacity to 1200 gpm.

BURDETTE: additional 300 gpm well near South Oak Drive.

FORT SMITH: 0.75 MG elevated storage tank in the Howard Hill area.

OMAHA: new 175 gpm Roubidoux water well to serve the southwest area of the system.

PEA RIDGE: 0.5 MG elevated tank near Hwy 72.

SOUTHEAST BRADLEY COUNTY: iron removal treatment plant consisting of aeration, detention, and filtration for existing Well # 2.

SOUTHWEST BOONE COUNTY: additional 0.11 MG standpipe located at the existing Gaither Mountain Tank Site.

REVISED PVC PIPE POLICY EFFECTIVE OCT. 1

In a previous issue of this newsletter, the Engineering Section published a proposed revision of its plastic pipe policy that, among other things, governs the maximum working pressure for PVC pipe used in public water systems. The table below contains information relating to the maximum pressures allowed by this proposed policy revision. The revision of this policy was prompted by changes in AWWA C900 and the factor of safety used in determining C900 pressure classes.

Since the proposed policy was published, very few comments have been received and none that presented issues that needed to be included in the policy. Therefore, the policy became effective on October 1, 2008. The policy in its entirety can be found on the Engineering Section website: www.healthyarkansas.com/eng/pdf/PVCPOLICY.pdf. For questions about the policy, contact Jeff Stone.

Maximum Working Pressure (psi)	ASTM 2241 SDR	C-900 DR	ASTM 2241 Pressure Rating	C-900 Pressure Class
275	13.5		315	
265		14		305
215	17		250	
200		18		235
170	21		200	
135		25		165
130	26		160	

begin and complete a systematic program. Such a program does not have to be complicated, but it does need to cover all essential equipment and be kept updated.

The CUPSS tool generates two customizable reports – an assets report and a financial report. The reports and other information allow an

operator to make more informed decisions, plan ahead, provide factual information for budgeting, and, ultimately, improve customer service.

Information on CUPSS or downloading the software can be done at www.epa.gov/safewater/cupss/. ♦

Mayors' report shows high return on infrastructure dollars

A report issued in August by the U.S. Conference of Mayors shows a high rate of return on investment dollars spent on water and sewer infrastructure.

Among the findings of the report:

- Every one dollar invested in public water and sewer infrastructure services adds \$8.97 to the national economy, adds \$6.35 to the Gross Domestic Product, and increases revenues in all industries by \$2.42.
- Each new job in local water and sewer creates 3.68 jobs in the national economy to support it.
- "Green" measures such as wetlands protection for source water protection will save dollars in avoided treatment costs and other environmental areas.

The report examined over 300 economic studies, books, and public and private sector reports to reach these conclusions. It also lamented the lack of federal investment in water infrastructure and claimed that local governments contribute 95 percent of the money spent on water and sewer infrastructure.

A copy of the report can be found at www.usmayors.org/urbanwater/. ♦



Water systems are reminded to check the expiration date on the bacti bottles they use. The date is listed on a paper label attached to the bottle. If the date has passed, discard the bottle and return the mailing container to the ADH.

Understanding your bacti sampling schedule

The most frequent interaction between most public water systems and the Arkansas Department of Health is the submittal of monthly compliance samples for bacteriological analysis and the receipt of those analytical results. Because that sampling is so critical, it is important that water systems understand the schedules by which the ADH mails those samples and the timelines under which they are to be returned.

Under the Total Coliform Rule, public water systems are required to monitor the water in their distribution system for coliform bacteria. In order to balance the workload for the ADH's Public Health Laboratory, sample bottles are mailed to public water systems each full week in a month based on a four week per month schedule. The particular schedule for a system is noted on the mailing label for the sample bottles.

Once received by the water system, the samples are to be collected and submitted to the ADH in the following week of that month or the first full week of the following month. The schedule is as follows:

Schedule #	ADH Mailing	Submittal to ADH Laboratory
#1	1 st week of month	2 nd week of month
#2	2 nd week of month	3 rd week of month
#3	3 rd week of month	4 th week of month
#4	4 th week of month	1 st week of next month

Systems which submit multiple sets of samples each month because of their population will have samples sent to them in multiple weeks. The sequencing of the schedules ensures each water system receives adequate bottles in advance of their compliance monitoring. Confusion sometimes occurs on the part of water systems which receive bottles in the fourth week of the month and believe those bottles are meant for that same month when they are actually meant for the following month.

In order to meet the requirements for the Total Coliform Rule, it is critical that water systems submit their initial compliance samples within the calendar month for which they were intended. The Engineering Section has been cited by EPA auditors for allowing even a couple days of leeway beyond the end of the month for the submittal of the original compliance samples. If a sample collected late in the month is positive for coliform and requires resample, or is invalid (too old, form incomplete, etc.), those resamples and replacement samples can be collected in the next month provided they are collected within 24 hours after receipt of the resample / replacement bottle.

Any valid bacteriological sample submitted by a water system to the Public Health Laboratory will be analyzed, regardless of whether it conforms to that system's mailing schedule. However, in addition to the previously mentioned workload issue for the lab, knowing the ADH's mailing schedule helps a water system's personnel to know when to expect sample bottles each month and whether to inquire about possible delayed or lost bottles.

Water systems are encouraged to submit samples to the Public Health Laboratory via the ADH's courier system which collects samples from county health offices and provides overnight delivery to the Lab at no charge. A listing of those offices and pickup times can be found at www.healthylarkansas.com/eng/.

Hard copy results of bacteriological analyses are mailed to the water systems within seven days of submittal. The results are also posted online at the Engineering Section's website as soon as they are received from the Laboratory (www.healthylarkansas.com/eng/bacti.htm).

If you have questions or issues concerning bacteriological sampling or analytical results contact your district staff with the Engineering Section.

NATIONAL

* The National Academies has published a free 28 page general information booklet on drinking water. The booklet provides an introduction to drinking water issues and draws from a body of reports from the National Research Council to provide an overview of public water supply and demand, water management and conservation, options for the government and the private sector, and the economic and ecological aspects of drinking water. It can be ordered or downloaded from <http://dels.nas.edu/water/basics.shtml>.

* The EPA announced a final rule in June to clarify that permits under its National Pollutant Discharge Elimination System are not required in order to transfer water from one body of water to another. The necessity of an NPDES permit for some water transfers in the U.S., particularly where the transferred water is of lower quality than the receiving stream, has been litigated for a number of years. EPA stated in the final rule that Congress intended that water resource agencies and other state authorities would oversee such transfers, not the NPDES program. Lawsuits challenging the rule were filed in July by environmental organizations in New York and Florida.

* The EPA proposed in an August 15 *Federal Register* notice an Information Collection Request for medical and veterinary facilities. Under the proposal, a mandatory questionnaire would seek information on the handling and disposal of unused pharmaceuticals. The proposal is apparently one outcome of press reports last spring about the finding of pharmaceuticals and personal care products in drinking water. Other efforts in this area by EPA include an interim report on the disposal of unused pharmaceuticals - www.epa.gov/waterscience/guide/304m/2008/hsi-PRELIM-study-200808.pdf, and a request to the National Academy of Sciences to provide advice on the human health risks from low levels of pharmaceutical chemicals in drinking water.

* Due to the strong demand for agricultural fertilizer, higher prices and shortages are being reported by some utilities for water treatment chemicals. Phosphate is a key component in fertilizer but it is also used in water treatment to inhibit corrosion and prevent the leaching of lead and other metals. Demand from emerging economies overseas and increased ethanol production in the U.S. has made it difficult for companies which manufacture phosphate based corrosion inhibitors to obtain raw materials. The market for phosphate based corrosion inhibitors is a miniscule part, less than one percent, of the global phosphate market.

News of Note

* The U.S. Food and Drug Administration has issued proposed regulations requiring bottle water manufacturers who obtain their source water from other than a public water system to test that source at least once a week for total coliform and E.coli. If positive for E.coli, the source would not be considered suitable for production until the problem was found or the source retested and found to be clean. The regulations are FDA's response to the EPA Ground Water Rule. FDA is required to promulgate rules for bottled water that are equivalent to those under the Safe Drinking Water Act or make a determination that such a rule is not necessary to protect public health.

ARKANSAS

* Plans by communities in central Arkansas to supplement their drinking water supply with 20 to 40 million gallons a day from Lake Ouachita have been put on hold by the U.S. Army Corps of Engineers' Vicksburg Office, according to the director of Metroplan. Jim McKenzie informed the Metroplan Board of Directors in September that the Corps was concerned that the safety rating for the Lake Ouachita dam was insufficient to raise the lake elevation

the eight or nine inches required to store the requested water. The Corps will be studying the condition and rating of the dam for a three to five year period. McKenzie said another request to the Corps for an additional withdrawal of 15 million gallons of water a day from Greers Ferry Lake has been on hold for months. Metroplan has been working with the 26 member Mid Arkansas Water Association on a long term water supply for the area.

ENGINEERING SECTION

* The 2007 Annual Compliance Report for the Arkansas drinking water program was published by the Engineering Section in June. The report lists and summarizes the drinking water violations by public water systems for calendar year 2007. A copy of the report can be viewed at www.healthyearkansas.com/eng/.

* Jason Gilkey has joined the Engineering Section as an Environmental Specialist in District 6 which covers the southwest area of the state. Jason is a military veteran having served with the U.S. Marine Corp, holds a bachelor degree from the University of Arkansas at Fort Smith, and has taken graduate courses in watershed management. He formerly worked as an Environmental Technician for the City of Fort Smith conducting laboratory tests, stream sampling, and stream studies. He is also a journeyman carpenter, enjoys painting artwork, and playing rhythm and bass guitar.



* Stephen Youngblood, District Engineer for the southwest area of the state, has been granted registration as a Professional Engineer in Arkansas based on reciprocity. Stephen completed his requirements as a Professional Engineer in the state of Oklahoma. He joined the Engineering Section in May.

Mandatory Training Course Schedule

Most Current Listing is at: www.healthyarkansas.com/eng/autoupdates/oper/mandtrngall.htm (Courses begin at 8:00 a.m.)

MANDATORY COURSE NAME	START DATE	END DATE	OPCERT GRANT ELIGIBLE COURSE	CITY	LOCATION All courses begin at 8 a.m.	SPONSOR
Intermediate Treatment	10/01/08	10/15/08	Yes	Internet	Contact AEA for Registration	AEA
Intermediate Distribution	10/06/08	10/08/08	Yes	Camden	Arkansas Env Acad, 100 Carr Road	AEA
Basic Distribution (PM Class)	10/07/08	10/30/08	Yes	Van Buren	Crawford Co Adult Ed Center, 605 Alma	AEA
Intermediate Distribution	10/07/08	10/09/08	Yes	Jonesboro	CWL Serv Center, Johnson & Main	ARWA
Intermediate Distribution	10/13/08	10/15/08	Yes	Maumelle	Wastewater Plant, 425 B Hyman Dr	AEA
PWS Compliance	10/14/08	10/14/08	Yes	West Fork	Wenzel Com Center, 222 Webber	ADH
Intermediate Distribution	10/15/08	10/31/08	Yes	Internet	Contact AEA for Registration	AEA
Intermediate Treatment	10/20/08	10/22/08	Yes	Arkadelphia	Recreation Ctr, 2555 Twin Rivers Dr.	AEA
Basic Treatment	10/21/08	10/23/08	Yes	Lonoke	ARWA Training Facility, 240 Dee Dee	ARWA
Advanced Treatment	11/03/08	11/17/08	Yes	Internet	Contact AEA for Registration	AEA
Basic Treatment	11/03/08	11/05/08	Yes	Camden	Arkansas Env Acad, 100 Carr Road	AEA
Intermediate Treatment	11/04/08	11/06/08	Yes	Midway	Baxter Co OEM Bldg, 170 Dillard Dr.	ARWA
Advanced Distribution	11/11/08	11/13/08	Yes	Van Buren	Crawford Co Adult Ed Center, 605 Alma	AEA
Advanced Distribution	11/17/08	11/28/08	Yes	Internet	Contact AEA for Registration	AEA
Advanced Treatment	11/17/08	11/19/08	Yes	Camden	Arkansas Env Acad, 100 Carr Road	AEA
Basic Water Math	11/18/08	11/18/08	Yes	Lonoke	ARWA Training Facility, 240 Dee Dee	ARWA
Advanced Distribution	11/18/08	11/20/08	Yes	Jonesboro	CWL Serv Center, Johnson & Main	ARWA
Applied Water Math	11/19/08	11/19/08	Yes	Lonoke	ARWA Training Facility, 240 Dee Dee	ARWA
PWS Compliance	11/20/08	11/20/08	Yes	Lonoke	ARWA Training Facility, 240 Dee Dee	ADH
Basic Distribution	12/01/08	12/03/08	Yes	Camden	Arkansas Env Acad, 100 Carr Road	AEA
Basic Water Math	12/02/08	12/02/08	Yes	Lonoke	ARWA Training Facility, 240 Dee Dee	ARWA
Advanced Treatment	12/02/08	12/04/08	Yes	West Fork	Wenzel Com Center, 222 Webber	ARWA
Basic Water Math	12/03/08	12/14/08	Yes	Internet	Contact AEA for Registration	AEA
Applied Water Math	12/03/08	12/03/08	Yes	Lonoke	ARWA Training Facility, 240 Dee Dee	ARWA
PWS Compliance	12/04/08	12/04/08	Yes	Lonoke	ARWA Training Facility, 240 Dee Dee	ADH
Applied Water Math	12/05/08	12/17/08	Yes	Internet	Contact AEA for Registration	AEA
Advanced Distribution	12/08/08	12/10/08	Yes	Camden	Arkansas Env Acad, 100 Carr Road	AEA
Advanced Distribution	12/16/08	12/18/08	Yes	Lonoke	ARWA Training Facility, 240 Dee Dee	ARWA

*Opcert Grant Eligible Course – Meal and lodging expenses may be reimbursed for operators from Community or Non-Transient Non Community Public Water System serving a population of 3300 or less. The course may be space limited, with eligible system operators given preference.

All courses require pre-registration. The course sponsor must be contacted to register for each course and to confirm course information that is subject to change or cancellation. Contact information for the sponsors is shown below.

ADH – Arkansas Department of Health – Contact Jeremy Rowe or Martin Nutt – (501) 661-2623 – Jeremy.Rowe@arkansas.gov

AEA – Arkansas Environmental Academy – Contact Letitia Rusch – (870) 574-4550 – lrusch@sautech.edu

ARWA – Arkansas Rural Water Association – Contact Carol Shaw – (501) 676-2255 – info@arkansasaruralwater.org

Additional courses are shown on the internet at: <http://www.healthyarkansas.com/eng/autoupdates/oper/opcert/opcerttrng.htm>

Pandemic influenza planning webinar for utilities available for replay

With the influenza season fast approaching, water utilities may want to consider a review of their plan for the impact of an influenza pandemic. This past summer the Water Sector Coordination Council of the Department of Homeland Security sponsored a webinar on the subject for water and wastewater utilities, government agencies, and interested parties. A rebroadcast of the webinar is available to view online at https://www2.gotomeeting.com/en_US/island/webinar/provideEmail.tmp?Action=rgoto&sf=4. Registration is required in order to view the presentation.

Proposed CAW rates promote conservation & watershed protection

Central Arkansas Water, the largest water utility in the state, has proposed a rate structure which increases the cost of water for its 120,000 customers but which also provides a price break for low volume users. The rate schedule also proposes to assess a fee on both retail and wholesale customers for administering a watershed management program for the utility's primary water source – Lake Maumelle. The new rate schedule will be phased in over a three year period beginning in 2009.

The proposal provides a 15 percent discount for residential customers who use less than 300 cubic feet (~ 2250 gallons) per month. It will also apply a 30 percent premium on residential customers, including sprinkler meters, whose consumption exceeds 3300 cubic feet (~ 25,000 gallons) per month.

CAW Chief Executive Officer Graham Rich said the goal of the rate schedule is to lower the water utility's peak day demands, and the size of the resulting treatment plants and transmission mains required to meet those demands. He estimated about 18,000 of the utility's 120,000 customers would be eligible for the discount which would cost the utility \$250,000 per year. Residential customers with a sprinkler meter are not eligible for the discount.

A 45 cent monthly fee proposed in the rates for watershed management and land acquisition will raise an estimated \$900,000 a year. The fee would stop when the watershed fund accumulates \$3 million and resume when it dips below \$2 million.

In 2007, the utility approved a comprehensive watershed management plan and has spent nearly \$4 million this year on watershed costs.

Central Arkansas Water has the capacity to treat 157 million gallons of water a day. Daily demand for the system peaked last summer at 120 million gallons. The average demand during the winter months is about 65 million gallons a day. ♦

WATER OPERATOR LICENSE EXAMINATIONS

Up to date listing: <http://www.healtharkansas.com/eng/autoupdates/oper/operexam.htm>
Listed below are the dates and locations of examination sessions. All Treatment and Distribution exam grades will be available at the sessions. Acceptable photo identification (Drivers License or equivalent) will be required to sit for an Exam. Cell phones and other electronic communication devices are not allowed in exam sessions. Non-programmable calculators are allowed.

DATE	CITY	LOCATION	TIME
10/9/08	Camden	Arkansas Environmental Academy, SAU Tech	9:00 AM
10/10/08	Jonesboro	CWL Service Center, Johnson & Main	9:00 AM
10/16/08	Maumelle	Wastewater Plant, Hyman Drive	9:00 AM
10/23/08	Arkadelphia	Recreation Center, 2555 Twin Rivers Drive	9:00 AM
10/24/08	Lonoke	ARWA Training Facility, 240 Dee Dee Lane	9:00 AM
11/6/08	Camden	Arkansas Environmental Academy, SAU Tech	9:00 AM
11/7/08	Russellville	Tri-County Water, 5306 North Arkansas	9:00 AM
11/14/08	Van Buren	Crawford Co Adult Education Center, 605 Alma Blvd	9:00 AM
11/20/08	Camden	Arkansas Environmental Academy, SAU Tech	9:00 AM
11/21/08	Jonesboro	CWL Service Center, Johnson & Main	9:00 AM
12/4/08	Camden	Arkansas Environmental Academy, SAU Tech	9:00 AM
12/5/08	West Fork	Wenzel Community Center, 222 Webber St.	9:00 AM
12/11/08	Camden	Arkansas Environmental Academy, SAU Tech	9:00 AM
12/19/08	Lonoke	ARWA Training Facility, 240 Dee Dee Lane	9:00 AM

The above exam session information is subject to change. You should confirm this information just prior to the scheduled examination period. You may confirm the exam session and its location by contacting your District Specialist or Engineer at (501) 661-2623.

Please verify that your license application has been filed with the Engineering Section and that the required exam fee for each exam has been paid. The license exams require significant preparation prior to sitting for the exam. The preparation must include extensive study utilizing the study guide and recommended reference materials. Credit for the mandatory Certification Training Courses must be obtained prior to sitting for an exam.

PREPARATION = SUCCESS

Ground Water Rule Guides Released

The EPA has published information of benefit to water systems on the Ground Water Rule. The Rule, published in 2006, becomes effective in December 2009. The information includes quick reference guides, fact sheets, and guidance documents. The documents can be found at: www.epa.gov/safewater/disinfection/gwr/compliancehelp.html.

Position Wanted

Experienced water and wastewater operator available for short term, temporary employment with cities and utilities. Certifications include Grade III Water Treatment, Grade III Water Distribution, and Class 3 Wastewater operator licenses. Contact Benny Huggins at 479-331-2810 or tinyhuggins@yahoo.com.

ADH position paper advocates expanded water fluoridation

Tooth decay is an infectious, communicable, and preventable disease according to a position paper published by the Department of Health. The report states that 64% of the state's population currently are supplied fluoridated drinking water, but advocates the expansion of fluoridated water to the remaining one million Arkansans who are not served.

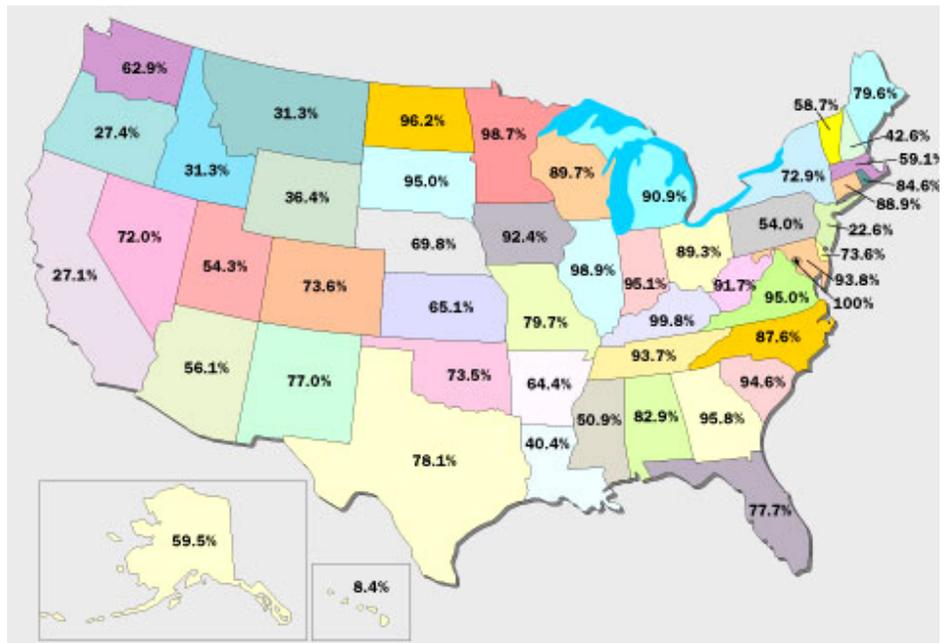
According to the report, an estimated 51 million school hours are lost nationally due to dental related childhood illness. Among children ages 6 – 8, the prevalence of untreated caries (tooth decay) is 43% in Hispanics, 35% in blacks, and 26% in whites. An Arkansas survey in 2006 found that 57% of third grade children had a cavity, 27% attend school with untreated caries, and 10% of children had emergency dental needs.

Adults are not immune from dental problems and the report estimates that among Arkansas adults over age 40, 15 to 23 percent have lost all teeth. Low income persons who do not benefit from dental care on a regular basis and persons who lack dental insurance or access to dental services are at an increased risk for dental caries which can frequently progress to loss of teeth.

Fluoridated drinking water has been cited by the federal US Centers for Disease Control and Prevention (CDC) as one of the greatest public health achievements of the 20th Century. According to CDC, water fluoridation reduces tooth decay among children by 18 to 40 percent. The CDC has set a 2010 goal of increasing to 75% the U.S. population served by optimally fluoridated community water systems.

Fluoride is a common element of rocks and soil, and is found in a number of foods and beverages. It is added to consumer products such as some toothpastes and mouthwashes to aid in the prevention of cavities.

Fluoride is also a naturally occurring element in water sources although in Arkansas it is rarely at a



Percent of each state's population supplied with fluoridated water.

Source CDC

level sufficient to provide a beneficial health effect.

According to the report, the cost of artificial fluoridation varies based on the size of the community being served. A community of 20,000 residents can fluoridate for about 50 cents per person per year. For a population of 5,000, the cost is estimated at \$3 per person per year.

The economic return can be significant. The per capita cost of water fluoridation over a person's lifetime can be less than the cost of one dental filling. For a community of 20,000 population, the American Dental Association estimates \$38 in savings from fewer cavities for every one dollar spent on fluoridation.

The report acknowledges that opponents have challenged the safety and effectiveness of water fluoridation, but points out that fluoridation has a long and successful track record. Fluoridation has also been endorsed by numerous national and international medical and scientific organizations.

The report was published earlier this year by the ADH's Office of Oral Health and the agency's Science Advisory Committee. A copy can be obtained by contacting the Office of Oral Health or the Engineering Section. ♦

Louisiana approves mandatory fluoridation

Louisiana Governor Bobby Jindal signed legislation in July requiring public water systems in that state serving more than 5000 connections to fluoridate.

The legislation requires affected water systems to inform the state by March, 2009 of the estimated capital costs to acquire and install fluoridation equipment. Water systems won't be required to install fluoridation unless sufficient funds have been identified by the state for the installation costs and six months of chemicals.

The bill also allows a community to have a vote on opting out of fluoridation if at least 15 percent of the population signs a petition requesting a vote.

With the addition of Louisiana, twelve states as well as Puerto Rico and the District of Columbia have statutory fluoridation requirements. According to the CDC, 67% of the U.S. population, or 170 million persons, are supplied with fluoridated water.

Fluoridation safety stressed by Canadian official

In response to Canadian press reports raising questions about fluoride's safety in drinking water, the chief dental officer of Health Canada issued a letter in July emphasizing that water fluoridated at optimum levels does not cause adverse health effects.

Peter Cooney wrote the letter following reports of disputed research linking fluoride to cognitive development problems in children, a rare bone cancer found in boys, and fluorosis - the mottling of teeth.

A Canadian panel of experts examining the reports found there was insufficient evidence to support the claims. However, it did recommend that the optimal fluoride dose in drinking water be reduced to 0.7 mg/l from the current range of 0.8 mg/l to 1.0 mg/l. The panel made the recommendation because of concern about overconsumption of fluoride due to its prevalence in diet, water and toothpaste.

About 43 percent of the population in Canada receives fluoridated drinking water. ♦

ADH Gets Grants for Oral Health Programs

The Office of Oral Health in the Arkansas Department of Health has been awarded nearly \$370,000 in two grants to improve oral health. The office will use the grants to promote community water fluoridation and dental sealants, educational programs, dental screenings and support surveillance programs.

One grant is from the U.S. Centers for Disease Control and Prevention and is renewable for up to five years. The second is from the Federal Health Resources Services Administration and is the third year for the ADH to receive the grant.

Office of Oral Health director Dr. Lynn Mouden cited the grants as an indication of what the state can accomplish in oral health.

Water Operator Licenses Issued

May 1, 2008 through July 31, 2008

Licensee Name	Grade/Type	System Name
BAKER ZACH	D-I & T-II	PIGGOTT WATERWORKS
BARNETT BRIAN	D - IV	COMMUNITY WATER SYSTEM
BARTON MICHAEL	T - IV	NASHVILLE WATERWORKS
BRATTON ROY	T - II	HOT SPRINGS NATIONAL PARK
CARRUTH DARREN	D - IV	BARTON LEXA WATER ASSOCIATION
CARTER JOSEPH	D - III	NE YELL COUNTY WATER ASSOC
CARTWRIGHT WILLIAM	D - IV	HEBER SPRINGS WATER SYSTEM
CROY SPENCER	D-II & T-II	REDFIELD WATERWORKS
DAVIS DONNIE	D - III	CITY CORPORATION
DAY JOSEPH	D - IV	DANVILLE WATERWORKS
FAULK DAVID	T - II	PRAIRIE GROVE WATERWORKS
FAZIO DEAN	D-IV & T-IV	BENTON-WASHINGTON REGIONAL PWA
FULTON TRACY	T - II	DARDANELLE WATERWORKS
GUTHRIE JODY	D - IV	JONESBORO WATER SYSTEM
HAARMEYER CHARLES	D - II	DEQUEEN WATER WORK
HARRIS CHRISTOPHER	D - IV	MARSHALL WATERWORKS
HICKS RONNIE	D - II	PEA RIDGE WATERWORKS
HIGGINS DARREN	D - II	DEQUEEN WATER WORK
HILDENBRAND ROBERT	D - II	DIAMOND CITY WATER
HILL STEVE	T - II	PIGGOTT WATERWORKS
HIXON CHRISTOPHER	D-IV & T-IV	KIMZEY REGIONAL WATER DISTRICT
HOOD JASON	D - IV	CONWAY WATER SYSTEM
HUTSON LARRY	D - II	NO PWS OF RECORD
JOYNER TIMOTHY	D - IV	CABOT WATERWORKS
KOONE JEREMY	D - IV	CONWAY WATER SYSTEM
LANIER GEORGE	D - VSS	TOLLETTE WATER
LEONARD BOBBY	D - I	LAVACA WATERWORKS
MAHAN TOMMY	D - IV	BEE BRANCH WATER
MCALISTER JARED	D - IV	CONCORD WATER & SEWER PFB
MCWILLIAM PATRICK	D - II	WATALULA WATER ASSOCIATION
MORROW JUSTIN	D - II	COTTER WATERWORKS
OWENS JOE	D - I	PERLA WATER ASSOCIATION
PATRICK BRANDON	T - III	HWY 63 WATER ASSOCIATION
PERKINS SAMUEL	D - IV	SPRINGDALE WATER UTILITIES
REAMES BRADLEY	D - IV	PARIS WATERWORKS
ROBERTS RODNEY	D - I	WALKER CREEK STATELINE RWA
STANDLEE CHARLES	D - I	GREEN FOREST WATERWORKS
WALDROP LARRY	D - III	EL DORADO WATERWORKS
WHITWORTH BRIAN	D - IV	MC CRORY WATERWORKS
WILSON MICHAEL	D - IV	MAGNOLIA WATERWORKS AND LYDESDALE WATER ASSOCIATION
WYNN CHRIS	D - II	NASHVILLE RURAL WATER ASSOC

The licensing program is behind in processing exam results and licenses due to an extended staff vacancy in the program. Exam results can be obtained by contacting Jeremy Rowe or Martin Nutt four weeks after an exam is taken.

EPA decides not to regulate 11 chemicals

EPA decided in July that it would not regulate 11 of 51 chemicals on the second Contaminant Candidate List (CCL). The CCL is required by the Safe Drinking Water Act to assist the EPA in setting priorities for drinking water regulations.

The agency found the 11 chemicals don't meet the criteria for regulation because they either don't occur in drinking water supplies or don't occur at sufficient concentrations to be of a health concern.

The chemicals include:

- boron
- 1,1-dichloro-2,2bis(p-chlorophenyl)-ethylene (DDE)
- 1,3-dichloropropene (Telone)
- 2,4-dinitrotoluene
- 2,6-dinitrotoluene
- s-ethyl dipropylthiocarbamate (EPTC)
- dacthal mono- and di- acid degradates
- fonofos
- terbacil
- 1,1,2,2-tetrachloroethane

EPA is planning to update health advisories for seven of the chemicals which have been found in drinking water at low levels.

The agency also postponed decisions on two other chemicals that have generated controversy – perchlorate and MTBE. EPA stated in the notice that it would soon make a decision on whether or not to regulate perchlorate, and that that it had made no decision regarding MTBE. EPA has adopted a revised reference dose for perchlorate and is currently conducting a health risk assessment for MTBE due to be completed in 2011.

CCL's have been published in 1998, 2005 and 2008. EPA must decide whether to regulate at least five or more contaminants from each list. ♦

Online treatment database established

Sometimes buried deep in EPA's web site are resources that one could use but might not know about. The Drinking Water Treatability Database may be one of those resources. EPA has developed and is continuing to expand a database of contaminants and treatment processes that is available on the internet to support consultants, assistance providers, water systems, and state regulators as they consider appropriate technologies to solve water system problems. The database currently contains a limited list of chemical, microbiological, and radiological contaminants; however, EPA has additions planned to cover up to 200 contaminants in the future.

Visitors to the site at www.epa.gov/tdb will find a source to identify treatment technologies for various contaminants and find more detailed information about the treatment processes. Users can also go in the opposite direction and find out what contaminants a particular technology can effectively treat.

On the contaminant side, the database contains an overview of the contaminant with regulatory and occurrence information. There is also data on contaminant properties and fate and transport. For treatment, the database includes a description of the process and the contaminants that can be treated.

The database is supplemented by an extensive list of references from the technical literature for each contaminant and process. Also, links on the site provide quick access to related sites on issues like regulatory standards, analytical methods, and risk assessment. Check it out!

Reprinted from the Weekly Update of the Association of State Drinking Water Administrators.

Rule on CO₂ sequestration proposed to protect groundwater sources

The EPA proposed a rule in July that aims to protect groundwater supplies from the effects of geological sequestration of carbon dioxide. Underground sequestration of carbon dioxide has been proposed as a way for industries which produce the gas, such as fossil-fueled power plants, to limit their atmospheric emissions. Carbon dioxide is considered a greenhouse gas and is identified as a key component in the debate over global warming.

The proposed rule would establish a new class of well under EPA's current Underground Injection Control program. The primary concern on underground sequestration is that flue gases could contain contaminants such as hydrogen sulfide and sulfur dioxide and nitrous oxides, or could form carbonic acid with the potential for leaching and mobilizing geologic contaminants such as iron, manganese, lead, arsenic, and organic compounds.

The American Water Works Association has urged the federal government to proceed slowly in this area and recommended that commercial geological sequestration projects be deferred until larger pilot projects by the U.S. Department of Energy have been completed.

Comments on the proposed rule are due by to EPA by November 24. EPA's website is www.epa.gov/safewater/uic/wells_sequestration.html.

Major Monitoring, MCL, Treatment Technique, & Licensing Violations

Community & Nontransient Noncommunity Public Water Systems April - June, 2008

ALEXA SPRINGS WATER CO	Bmon 5,6	MOUNT OLIVE WATER	Bmon 6
ALICIA WATER	BMCL 4	MOUNTAIN HOME WATER	TMCL 6
ALICIA WATER	Bmon 5	MT MORIAH WATER	OperLic 6
ALICIA WATER	OperLic 4	MT SHERMAN WATER	RMCL 4,5,6
ALL SEASONS MHP	Tmon 5	MT ZION WATER	OperLic 4,5,6
ALMA WATER	DMCL 4,5,6	MT ZION WATER	Bmon 5
ALPIN WATER	Bmon 5	MULBERRY WATER	DMCL 4,5,6
AR STATE PARK MT MAGAZINE	DMCL 4,5,6	NO GARLAND CO REGIONAL WATER	DMCL 4,5,6
BEN LOMAND WATER	Bmon 4	NASHVILLE RURAL WATER	DMCL 4,5,6
BEULAH GROVE WATER	OperLic 4,5,6	NASHVILLE WATER	DMCL 4
BIGGERS WATER	BMCL 5	NE YELL CO WATER	DMCL 4,5,6
BOONEVILLE WATE	DMCL 4,5,6	NEW LONDON WATER	DMCL 4,5,6
BRANCH WATER	DMCL 4,5,6	NORFORK LAKE ESTATES	Bmon 5
CAMDEN	DMCL 4,5,6	NORMAN WATER	TMCL 6
CAMPBELL WATER	OperLic 4	NORTH CAMPUS WATER	OperLic 6
CASA WATER	DMCL 4,5,6	NSC INTERNATIONAL	Bmon 5
CASA WATER	Bmon 6	ODEN PENCIL BLUFF WATER	DMCL 4,5,6
CHERRY HILL PFB	DMCL 4,5,6	ODEN PENCIL BLUFF WATER	BMCL 4,5
CHERRY HILL PFB	BMCL 5	OSAGE POINT MHP	Bmon 6
CLINTON WATER	BMCL 5	PANGBURN WATER	DMCL 4,5,6
COTTONSHED WATER	OperLIC 6	PARON OWENSVILLE WATER	DMCL 4,5,6
DANVILLE WATER	DMCL 4,5,6	PERLA WATER	BMON 4
DARDANELLE WATER	TMON 4	PIKE CITY WATER	DMCL 4,5,6
DENNARD WATER	Bmon 5	PLAINVIEW WATER	DMCL 4,5,6
DYER WATER	DMCL 4,5,6	PLAINVIEW ATER	TMCL 5,6
DYER WATER	OperLic 5,6	QUITMAN WATER	Bmon 4
EAST PRAIRIE CO WATER	Bmon 5	QUITMAN WATER	Tmon 5
EL DORADO WATER	BMCL 4,6	RATCLIFF WATER	Bmon 4
FOUNTAIN HILL WATER	BMCL 4	RATCLIFF WATER	DMCL 4,5,6
FOUNTAIN HILL WATER	DMCL 4,5,6	RATCLIFF WATER	BMCL 6
FOUNTAIN HILL WATER	Bmon 5	RIVER VALLEY WATER	OperLic 6
GASSVILLE WATER	Bmon 5	RIVERSIDE RETREAT	BMCL 6
GILLHAM REGIONAL WATER DIST	DMCL 4,5,6	SO PIKE CO WATER	BMCL 6
GREENBRIER WATER	DMCL 4,5,6	SDM WATER	RMCL 4,5,6
GREENBRIER WATER	BMCL 6	SDM WATER	FMCL 4,5,6
GREENWOOD WATER	DMCL 4,5,6	SE BRADLEY CO WATER	BMCL 5
HATFIELD WATER	DMCL 4,5,6	SEVIER CO WATER	DMCL 4,5,6
HICKORY RIDGE WATER	Dmon 6	SOUTH LOGAN CO WATER	DMCL 4,5,6
HICKORY RIDGE WATER	Bmon 6	SOUTH MOUNTAIN WATER	RMCL 4,5,6
HIGHFILL WATER	DMCL 4,5,6	SUBIACO ACADEMY WATER	DMCL 4,5,6
HORSEHOE BEND WATER	BMCL 6	SUMMIT WATER	BMCL 6
INDIAN SWITCH RURAL WATER	BMCL 5	SW REGION WILDERNESS CAMP	Bmon 5
JOHNSON TOWNSHIP WATER	BMCL 5	TEXARKANA WATER	DMCL 4,5,6
JUNCTION CITY WATER	BMCL 4	TOLLETTE WATER	Bmon 5
KINGWOOD MHP	Bmon 6	TRUMANN WATER	BMCL 6
LAKE TABLE ROCK ESTATES	BMCL 5	VANDERVOORT WATER	Tmon 5
LAKE TABLE ROCK ESTATES	Dmon 5	WABBASEKA WATER	OperLic 4,5,6
LEISURE HILLS MHP	Dmon 6	WALDRON WATER	DMCL 4,5,6
MADISON COUNTY WATER	BMCL 5	WILMOT WATER	Bmon 5
MADISON COUNTY WATER	Bmon 6	WOOSTER WATER	DMCL 4,5,6
MAGAZINE WATER	DMCL 4,5,6	WOOSTER WATER	Bmon 5
MAGNESS WATER	Oper 4,5,6	WYE MTN WATER	DMCL 4,5,6
MAGNOLIA WATER	BMCL 4		
MARVELL RURAL WATER	BMCL 4		
MAYFLOWER WATER	DMCL 4,5,6		
MONTGOMERY CO REGIONAL WATER	DMCL 4,5,6		
MORNING STAR WATER	FMCL 4,5,6		
MORNING STAR WATER	BMCL 6		
MOUNT IDA WATER	DMCL 4,5,6		

KEY: Bmon = Bacti Monitoring; BMCL = Bacti MCL; Dmon = Disinfection By Product Rule Monitoring; DMCL=Disinfection By Product Rule MCL or Treatment Technique; Tmon = SWTR Major Monitoring; TMCL = SWTR Treatment Technique; SWTR= Failure to Filter; RMCL = Radiochemical MCL; FMCL = Fluoride MCL; SMCL = Synthetic Chemical MCL; OperLic = Operator Licensing; 4 = April, 5 = May, 6 = June

NOTE!! The Arkansas Department of Health will be closed on the following dates due to declared holidays or by Governor's proclamation:

- Thursday November 27
- Friday November 28
- Wednesday December 24
- Thursday December 25
- Friday December 26
- Thursday January 1

No bacteriological samples will be accepted or analyzed and no courier service from the county health units will occur on these dates. Bacti samples submitted to the courier the day before will be too old.

REPORT OF THE Arkansas Drinking Water Advisory and Operator Licensing Committee

A. Martin Nutt, Training and Certification Officer

A quarterly meeting of the Arkansas Drinking Water Advisory and Operator Licensing Committee was held on July 9, 2008. Members present were Charles Nickle, P.E., Chair; Rodney Williams, P.E., Chair-Elect; Robert Hart, P.E., Executive Secretary; Steve Di Cicco; Scott Borman; Terry House; and Susan Merideth, P.E. Arkansas Department of Health staff members present were Martin Nutt, Reggie Rogers, and Ida Hampton. Guests present were Dennis Sternberg, Arkansas Rural Water Association; Randy Harper and Jonathan Richardson, Arkansas Environmental Academy; Dawn Keller, Arkansas Department of Environmental Quality; and Roger Bamber, Hosanna Heights Water.

Standing Business

Nickle called the meeting to order and introduced the new Committee member, Susan Merideth, P.E. from Jonesboro City Water and Light. The Committee then reviewed and approved the High School Waiver Request of Mr. Roger Bamber, Hosanna Heights.

Borman reported that most of the bugs were worked out with electronically tracking training attendance and that Districts should start scanning and submitting rosters to the primacy agencies. No Districts were effectively scanning as of the meeting.

Nickle kicked off his goal of finding alternative funding for operator training when the current OpCert Grant expires in 2010. A subcommittee including House, Hart, and Merideth were tasked with evaluating the efficacy of existing training funded under the grant as well as finding additional funding sources for future training. Both AEA and ARWA were asked to participate in the endeavor.

Nutt briefly described the Operator Information CD that was being used within the PWS Compliance Course and mailed to license applicants in lieu of printed documents. Nutt reported that the Licensing staff was in the process of updating the online training

database where operators can access both renewal and mandatory attendance records. Records dating back to July 2005 should be available on Engineering's website.

Nutt recapped the expansion of the OpCert grant to include reimbursement of meals and lodging for eligible systems attending backflow prevention courses and all mandatory training conducted by AEA and ARWA. Nutt mentioned that approximately two thirds of mandatory training currently offered was being funded under the grant. In SFY 08, AEA and ARWA respectively claimed approximately \$58,000 and \$113,000 for grant reimbursement. Total grant expenditures to date are approximately \$600,000 out of \$1.4 million: AEA claiming \$172,000, ARWA claiming \$313,000, with initial expenditures by ADH of \$10,000 for training equipment and \$100,000 for CSUS manuals provided to eligible systems. The Committee hopes to obtain a grant extension to better utilize grant funding. Considering the availability of funded training, Nutt planned to update Engineering's enforcement plan for licensing infractions.

As part of the subcommittee tasked to educate stakeholders on the use of Public Water System Service Fees, Hart presented to the Committee the materials he had developed for that purpose. The materials included a PowerPoint presentation and a brochure that could be utilized by interested parties to inform the public about the use of service fees within Arkansas' drinking water industry.

New Business

Nutt informed the Committee that the Association of Boards of Certification would be increasing its exam grading fee to \$25. Nutt did not propose raising Arkansas exam fees, but wanted to make the Committee aware of ABC's increase. The increase would become effective during the next contract renewal.

Nutt reported that several Arkansas operators had volunteered for and completed a review of exam questions for ABC Distribution 3 and Treatment 1 exams. Operators serving in the group review were: Jesse Burch, Beaver Water District; Bobby Brummett and Larry Rose, Central Arkansas Water; William Winn, Fayetteville Water; Bub Pendergrass, Fort Smith Water Utilities; Jake Rice, Jonesboro City Water & Light; Mike Thomason, Maumelle Water Management; Jonathan Shipley, City Corp Russellville; Scotty Boggs, Searcy Water; Danny Thompson, Tri-County Regional Water; and Ken Fratesi, West Helena Water. ADH facilitators were Nutt and Jeremy Rowe. Maumelle Water Management volunteered the use of their training facilities and lunch was provided by ABC. Nutt reminded the Committee that item bank review is an essential process in exam development and maintenance, and applauded the participating operators and their systems for volunteering a day's work to the task.

Reports to the Committee

In his Budget and General Program Report, Hart reported that insufficient funding allocation was proving an obstacle to the Section's operation. Allocation for SFY 09 would be the same as for SFY 08, even though new rules are coming online that would have to be implemented. The Section has funds to spend but not the approval to spend it. Regardless, Hart indicated that LT2 monitoring for larger systems was approaching completion. Approximately the same number of systems/sources monitored for large systems would be monitored for small systems starting in October of this year. UCMR2 monitoring continued to be conducted since its implementation in January, 2008.

Nutt, in his Licensing Update, stated that the program was still behind in processing exams but that he hoped to catch up since Ida L.

Hampton had filled his long vacant administrative position. Nutt also noted that three utilities were approaching administrative order for licensing violations.

Harper reported that Dr. Corbet Lamkin had been installed as the New Chancellor for SAU Tech. Harper noted that, though AEA had suffered budget cuts, he did not foresee cutting programs. Harper hoped to bring in additional funding through OSHA training offered by AEA. Richardson reported an increase in attendance for mandatory training. Since the last Committee meeting, AEA had offered 20 water classes with 147 students. Internet courses were not seeing the anticipated interest.

Sternberg reported an attendance of 540 students at ARWA water classes since the first of the year. However, Sternberg was concerned that fuel costs may impact the availability of training provided by ARWA in the future. He thought fee based training may soon be a necessity. Neither ARWA nor AEA had seen eligible systems attending grant funded backflow training.

Other Business

No other business was brought before the Committee. The next Committee Meeting was set for October 8, 2008. ♦

Money Available From EPA OpCert Grant For Training Expenses

Assistance with meals and lodging expenses, for eligible systems, is available for all mandatory water license exam training courses. The Arkansas Environmental Academy and the Arkansas Rural Water Association can pay these expenses for eligible operators through the USEPA OpCert Training Grant. The training provider should be contacted to take advantage of the grant. Exam preparation reference manual sets are also available for grant eligible systems through the ADH, Engineering Section.

Backflow Tester Courses offered by both organizations are eligible for reimbursement for course registration fees (if applicable), meals, and lodging. ARWA's Two Day Schools (water related day) are also eligible.

The latest listing of courses eligible for grant reimbursement can be found at: www.healthyarkansas.com/eng/autoupdates/oper/opcertlinks.htm. Please contact the training provider of the course to determine your grant eligibility and to register for the grant. Registration should be done well in advance of attending a course.

The EPA OpCert grant eligible systems are Community and Non-Community Non-Transient Public Water Systems serving fewer than 3300 persons. Please be aware the grant is due to expire September 30, 2010.

Contact information for the two grant eligible trainers is:
AR Environmental Academy – Contact Letitia Rusch – (870) 574-4550 – lrusch@sautech.edu .
AR Rural Water Association – Contact Carol Shaw – (501) 676-2255 – info@arkansasruralwater.org .

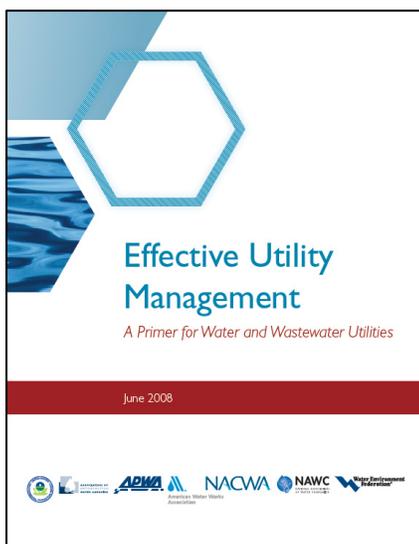
Collaborative Effort Provides Tools for Utility Management

Six water and wastewater associations have collaborated together and with USEPA to prepare a package of tools to assist in effective management practices. The coalition of associations, known as the Effective Utility Management coalition, has published a free primer on utility management success, and has identified ten attribute areas in which to improve performance along with available resources for each area.

The primer publication covers five keys to management success, a process for improvement, and performance measures to evaluate progress.

The ten attributes areas allow a manager to seek assistance in one particular area or provide a framework for a entire utility-wide evaluation. The attributes describe outcomes applicable to water and wastewater utilities for the areas of water resources, product quality, infrastructure sustainability, customer satisfaction, finances, leadership, operations optimization and redundancy, community relations, and stakeholder support.

Both the primer document and attribute information are available online – www.watereum.org. In addition to EPA, the coalition includes the American Water Works Association, Water Environment Federation, Association of Metropolitan Water Agencies, National Association of Clean Water Agencies, American Public Works Association, and National Association of Water Companies.



AWW&WEA District Meetings

See also the Division's web site www.healthyarkansas.com/eng/ for updates.

DATE	TIME	CITY	LOCATION	SPONSOR
October 2008				
2	5:00PM	Benton	Brown's Restaurant	Central District, AWW&WEA
2	6:30PM	Fort Smith	Golden Corral	Western District, AWW&WEA
9	5:30PM	Russellville	Western Sizzlin	AR Valley District, AWW&WEA
9	5:30PM	Batesville	Western Sizzlin	North Central District, AWW&WEA
9	5:30PM	West Memphis	Southland Greyhound Park	Eastern District, AWW&WEA
15	9:00AM	Eureka Springs	Inn of the Ozarks	Northwest District, AWW&WEA
16	1:00PM	Jonesboro	Jonesboro PLW's Service Center	Northeast District, AWW&WEA
21	6:30PM	Barkada	Young's BBQ	Southeast District, AWW&WEA
23	6:00PM	Waldo	to be announced	Southwest District, AWW&WEA
November 2008				
6	5:00PM	Conway	1 st Church of the Nazarene	Central District, AWW&WEA
6	6:30PM	Fort Smith	Golden Corral	Western District, AWW&WEA
13	5:30PM	Clarksville	Western Sizzlin	AR Valley District, AWW&WEA
13	5:30PM	Batesville	Western Sizzlin	North Central District, AWW&WEA
13	5:30PM	to be announced	to be announced	Eastern District, AWW&WEA
18	6:30PM	Crossett	Western Sizzlin	Southeast District, AWW&WEA
19	9:00AM	Berryville	Community Center	Northwest District, AWW&WEA
20	1:00PM	Jonesboro	Ron's Catfish	Northeast District, AWW&WEA
20	6:00PM	Hope	to be announced	Southwest District, AWW&WEA
December 2008				
4	5:00PM	Benton	Brown's Restaurant	Central District, AWW&WEA
4	6:30PM	Fort Smith	Golden Corral	Western District, AWW&WEA
11	5:30PM	to be announce	to be announced	Eastern District, AWW&WEA
11	5:30PM	Russellville	Western Sizzlin	AR Valley District, AWW&WEA
11	5:30PM	Batesville	Western Sizzlin	North Central District, AWW&WEA
16	6:30PM	to be announced	to be announced	Southeast District, AWW&WEA
17	9:00AM	Fayetteville	Town Center	Northwest District, AWW&WEA
18	1:00PM	Jonesboro	Western Sizzlin	Northeast District, AWW&WEA

ENGINEERING SECTION
 ARKANSAS DEPARTMENT OF HEALTH
 4815 WEST MARKHAM, SLOT 37
 LITTLE ROCK, AR 72205-3867
 (501) 661-2623
www.HealthyArkansas.com/eng/

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