



ARKANSAS DRINKING WATER UPDATE

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ENGINEERING SECTION – DEPARTMENT OF HEALTH

Spring 2013

REVISED TOTAL COLIFORM RULE ISSUED

Lance Jones, P.E., Chief Engineer

On February 13, 2013, the Environmental Protection Agency (EPA) published revisions to the 1989 Total Coliform Rule (TCR). These revisions are known as the Revised Total Coliform Rule (RTCR) and include several significant changes in the requirements that water systems must meet regarding the bacteriological quality of the water they provide to consumers. The RTCR is scheduled to become effective on April 1, 2016.

The primary changes in the RTCR are to place more emphasis on public health protection by requiring water systems to correct sanitary deficiencies that contribute to the presence of coliform bacteria in the distribution system and a higher emphasis when the presence of E-Coli bacteria is detected.

The major change of the RTCR from the TCR is the elimination of the MCL and MCLG for total coliforms. Under the current TCR, a total coliform MCL violation is issued when total coliform is detected in more than one water sample per month (or more than 5% of the samples when more than 40 monthly samples are collected). The issuance of the MCL violation requires the water system to conduct a public notice to consumers, but does not require a corrective action.

The RTCR keeps the same trigger levels for total coliforms, but instead of an MCL being issued, the water system must conduct a Level 1 Assessment of the system for sanitary defects and submit the report to the State primacy agency for review. The assessment must include the following:

1. Inadequacies in sample sites, sampling protocol, and sample processing
2. Atypical events that may have affected distributed water quality or indicate that distributed water quality was impaired
3. Changes in distribution system maintenance and operation that may have affected or are affecting distributed water quality including water storage
4. An evaluation of source water quality and treatment changes or conditions that may affect distributed water quality, where appropriate

5. Existing water quality monitoring data.

At this time, ADH intends for the water system personnel to conduct Level 1 Assessments. Any sanitary defects that are identified shall be corrected to protect water quality. Failure to conduct the assessment or correct sanitary defects will result in a treatment technique violation being issued.

The RTCR also includes requirements for Level 2 Assessments which require the same elements of the Level 1 Assessments be evaluated in more detail and may involve the State or approved third party to participate in the assessment process. Level 2 Assessments are required under the following conditions:

1. More than one Level 1 Assessment is triggered in a 12-month period.
2. An MCL violation is issued for the presence of E-Coli in the distribution system. The Arkansas Department of Health also requires a 'Boil Water Advisory' be issued when an E-Coli MCL violation is issued.

The monitoring requirements for the RTCR are essentially the same as under the current TCR for routine and repeat samples (samples following a total coliform positive result). However, the current requirement of collecting a minimum of 5 samples in the month following a total coliform positive sample will be removed.

There are other minor changes in the new Regulation and more information about its implementation will be forthcoming prior to its effective date.

More information regarding the details of the RTCR can be found at the EPA website:

http://water.epa.gov/lawsregs/rulesregs/sdwa/tcr/regulation_revisions.cfm

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Water Meters and Septic Systems Permits

Jeff Stone, P.E., Director

The Arkansas Department of Health's Rules and Regulations Pertaining to Public Water Systems has requires that before water service can be provided to a building or residence, the customer must provide the utility with written documentation that the Department of Health has approved the sewage disposal system (if not served by a municipal type system) and that the building plumbing has been inspected and found to be in compliance with the plumbing code. While compliance with these requirements could overall be described as good, there is the occasional oversight that arises.

The purpose of these requirements is twofold. First, these requirements are a basic public health measure that aims to prevent improper sewage disposal or improper plumbing. Second, these measures are an aid to customers that will assist them in getting their "ducks in a row" prior to proceeding with the significant financial investment of constructing the building or residence. Normally, the builder will request that the utility provide a temporary "construction meter". It is at that time, prior to construction starting, that the utility should be provided with the written documentation that the sewage disposal system has been approved. If this step has not been taken, it is possible that the building or residence construction may not allow adequate room or adequate soils for a system to be approved and constructed later. This exposes the owner to significant risk. With regards to the plumbing approval, that documentation is typically provided a later date, after the plumbing portion has been constructed and inspected, but prior to the water service being transferred into the owners name.

Approximately a dozen times a year, the Arkansas Department of Health will find that a building or residence has been constructed without first obtaining a sewage disposal approval. Depending upon the nature of the soils and the size of the remaining lot area, the owner may or may not be able to salvage the property. The cooperation of the utilities in verifying the sewage system approval early in the process is key to avoiding these problems. If a water operator or manager has any questions concerning these issues, please contact either your district engineer or your local Environmental Health Specialist at the local county health unit. Contact information for local health units can be found at: <http://www.healthy.arkansas.gov/programsServices/localPublicHealthOffices/Pages/default.aspx>

Valve and Hydrant Training

Teresa Lee, P.E. Engineer Supervisor

Searcy Water Utilities will be hosting a hands-on three day training session on valves and hydrants Tuesday through Thursday, August 20 - 22, at the Searcy Wastewater Training Facility at 260 N. Bypass in Searcy. Each session begins at 8:30 a.m. There is no cost for the training.

This training is being funded by the new EPA Small Water Systems' Training and Technical Assistance Grant. The training is being presented by Texas A&M Engineering Extension Service (TEEX). TEEX will bring a trailer to the Searcy Wastewater Training Facility for demonstrations and learning purposes.

This hands-on training will include:

- Valve classification on the types of valves and their uses
- Water Main Isolation Valves
- Wastewater Valves
- Automatic Control Valves
- Backflow Prevention Devices
- Different types of fire hydrants
- The use of tools required for maintenance and hydrant repair
- How to plan and schedule maintenance work
- How to maintain a budget and cost control system
- Safety practices pertaining to valves

For more information, please contact Jimmy Smith at (501) 268-2481.

20 hours of direct training credit toward water license renewal will be awarded upon completion.

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 the Section at the address listed on the last page.

Central Arkansas Water Raises Awareness on Plumbing Leaks

John Tynan, Central Arkansas Water

In an effort to raise awareness among its customers on how small repairs can make a big difference in water use, Central Arkansas Water participated in the national **Fix a Leak Week** activities on March 18-24. **Fix a Leak Week** is organized by the EPA WaterSense Program, a program designed to educate consumers, utilities, businesses, builders, and landscaping companies on the importance of wise water use.

Central Arkansas Water (CAW) has been a member of the EPA WaterSense Program since 2010 and has participated in **Fix a Leak Week** since 2011.

As part of its **Fix a Leak Week** activities, CAW provided free leak repair services to 80 qualifying low income or elderly customers throughout Little Rock and North Little Rock. The primary focus for the repairs was leaking toilets. CAW has estimated that fixing toilet and other small leaks can save customers up to 10,000 gallons of water a year and can add up to significant savings on their water and wastewater bills. To qualify for participation in the leak repair assistance program, an elderly or low income customer must own their home and have had at least a 50% increase in their last two utility bills. Central Arkansas Water began analyzing accounts and contacting customers in early January in order to identify candidates for this assistance program.



CAW also hosted other activities, including the promotional giveaways of low-flow showerheads, faucet aerators and leak detection tablets as well as using online videos to demonstrate how to repair toilet leaks. CAW kicked off its **Fix a Leak Week** activities through participation in the Little Rock-North Little Rock St. Patrick's Day parade, where they distributed toilet leak detection tablets.

To highlight the importance of **Fix a Leak Week**, Central Arkansas Water also worked with Governor Beebe to issue a proclamation for **Fix a Leak Week**. In the proclamation, Governor Beebe emphasized the importance of water supplies to the economy and quality of life throughout Arkansas, highlighted the water and cost savings that can result from indoor and outdoor leak repair, and encouraged all utilities, businesses, and individuals throughout Arkansas to repair leaks and use water wisely.

In addition to its focus on indoor leaks, CAW has broadened its education efforts to include the importance of fixing outdoor leaks and using wise water use principles for outdoor watering. CAW partners with the Pulaski County Cooperative Extension Service to educate outdoor water users about water wise outdoor irrigation practices through its Sprinkler Smart program. This year-round effort provides irrigation audits for irrigation accounts and reaches hundreds of individuals through outreach and education workshops. The Sprinkler Smart efforts also have a strong focus on collaboration with irrigation professionals, empowering those that work day-to-day on irrigation systems with the most cutting edge information and water-wise practices.

For additional information on either CAW's **Fix a Leak Week** or Sprinkler Smart program, contact Stephanie Hymel or John Tynan at 501-372-5161

Central Arkansas Water is a regional drinking water utility that provides safe, high-quality, affordable water to over 400,000 individuals and businesses throughout the central Arkansas area. For more information about CAW, visit www.carkw.com

For more information about the EPA WaterSense Program, visit www.epa.gov/watersense/index.html

For more information about **Fix A Leak Week**, visit www.epa.gov/watersense/our_water/fix_a_leak.html

Geology & Drinking Water of the West Gulf Coastal Plain

Darcia Routh, P.G.
Geology Supervisor & Manager, Source Water Protection Program

The southwest quarter of Arkansas is within the West Gulf Coastal Plain Physiographic Province. Sometimes it's just called the coastal plain. The cities of Texarkana, Hope, El Dorado, Magnolia, Monticello, Pine Bluff and the southwestern edge of Little Rock are all part of this natural division. The coastal plain is an area of gently sloping terrain extending across the southern US from Georgia to Texas. Southwestern Arkansas is primarily blanketed in loblolly pine forests. Mixed hardwood forest, fertile bottomlands along the Red River, and rich blackland prairies atop chalks, a type of limestone composed of microscopic brown algae, are also common.

This part of Arkansas was covered by the waters of the Gulf of Mexico until about 50 million years ago. As the Gulf of Mexico formed, it shaped the geology and natural history of the area. As the Gulf seas retreated further south, the sands, gravels, silts and clays left behind formed thick wedges of sediments. The sandy soils and abundant water in this part of Arkansas allow for a robust timber industry. Additionally, older Mesozoic rocks and sediments—limestones of the Jurassic Smackover Formation, sandstones, limestones, and chalks of the Cretaceous—yield abundant mineral resources, including petroleum, and bromine brines. Gypsum, bauxite, nepheline syenite, lignite, and even diamonds are open-cut mined in Arkansas' coastal plain.

Water is, of course, an equally important natural resource in Arkansas. Abundant surface and groundwater are exploited for drinking water, timber, recreation, and industrial uses in this part of the state. Surface water sources of drinking water include five intakes on lakes—Lakes Millwood, Columbia, and Nichols—and ten intakes on rivers—including on the Little, Cossatot, Little Missouri, Ouachita, and Saline Rivers. Open cut mining, clear-cutting and pesticide use in the timber industry, and production of brines and petroleum are the largest pollution threats to surface drinking water sources in the coastal plain.

Groundwater is also a major source of drinking water in the region, with 291 wells producing reliable quantities of high quality drinking water from sediments of Cretaceous and Tertiary age. Most of these wells produce water from the Tertiary Sparta sands. The Sparta crops out at the surface in southwest Arkansas; this narrow belt acts as the recharge area. Infiltration of rain water directly into the outcrop belt and migration of water from the river channels dissecting the Sparta provide the “fresh” water. Further south in Louisiana, where the Sparta is buried more deeply under thicker sediments, the water contains too many solids, especially salts, to be suitable for human consumption. The tan area on the surface geology map (see page 5) shows the surface distribution of Tertiary sediments; the tan also includes very small areas of younger sediments, mostly along streams and rivers.

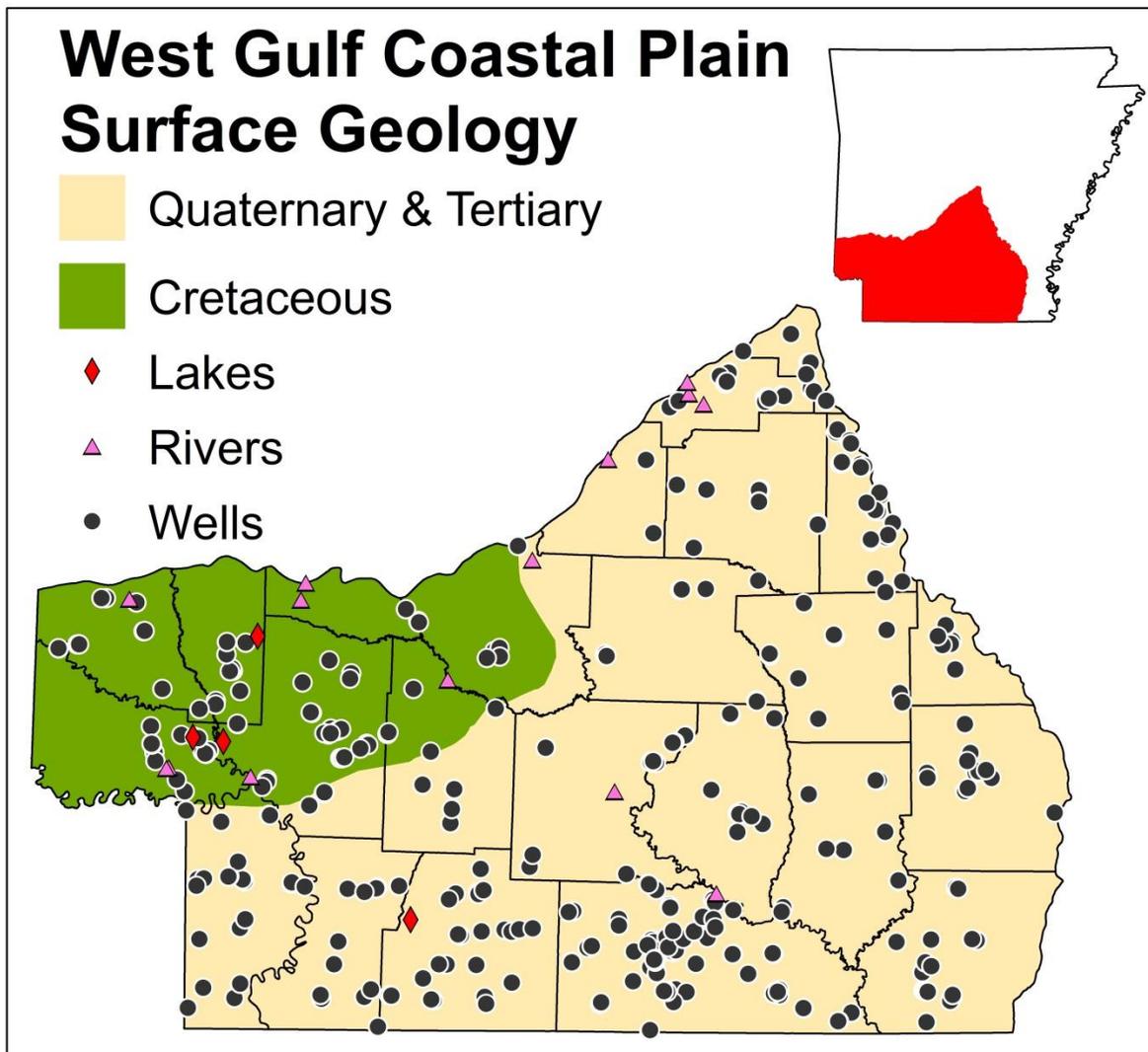
The Gulf of Mexico rose to its highest level during the Cretaceous Period and covered all of Arkansas south and east of the Ouachita and Ozark Mountains. The eroding mountains were the source of sand and gravels deposited in the Cretaceous seas. Cretaceous marine deposits—remnants of the sea shore in the age of reptiles—provide high quality drinking water from the Nacatoch and Tokio sands. The green area on the map represents the Cretaceous rocks and sediments. Rain falling on the narrow band of surface sediments provides fresh water recharge to these sediments.

To the south near Norphlet, the Nacatoch and Tokio Sands sometimes contain petroleum and are exploited for oil. Unfortunately, common practices in the glory days of the oil boom during the early 20th century led to extensive surface contamination. For instance, blowouts of oil wells during drilling, storage of produced oil in unlined pits and open ditches, and allowing the natural gas “cap” in the subsurface to escape to the atmosphere all have left their scars on southwest Arkansas. Modern exploration and production practices leave a lighter environmental footprint, but still pose risks to surface and groundwater. Proper plugging and abandonment of dry holes and unproductive oil and gas wells and the setting of deep surface casings—isolating the fresh water aquifers—are two modern practices that help protect our drinking water aquifers and watersheds.

Currently the deeper Jurassic Smackover Brown Dense Limestone is the target of an unconventional oil play utilizing hydraulic fracturing techniques. The source water protection team reviews all of the permits for oil & gas drilling issued by the AR Oil and Gas Commission and informs all public water systems of proposed activities within wellhead or surface intake assessment areas. We also review and inform public water systems about other permitted activities within watersheds or wellhead protection areas. Local efforts are the most successful at preserving both the quality and quantity of drinking water.

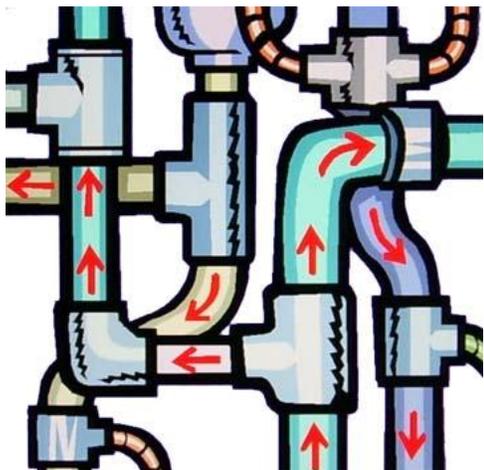
In 1996, in response to declining water levels and water quality impairments in the Sparta aquifer in south Arkansas and north Louisiana, the Arkansas Natural Resource Commission designated five counties—Bradley, Calhoun, Columbia, Ouachita, and Union as a “Critical Ground-Water Area.” Voluntary efforts in Union County, coordinated through the Union County Conservation Board, protect the Sparta Aquifer through conservation, groundwater re-use, and tapping a surface supply source on the Ouachita River. As a result, large-quantity industrial users moved away from Sparta dependence. Chloride concentrations dropped and water levels rose consistently as a result of these source protection efforts.

Have any questions about geology and drinking water for your system? ADH geologists and specialists in source water protection stand ready to assist public water systems and local governments in their source water protection efforts. Contact us at 501-661-2623.



CROSS-CONNECTION CONTROL PROGRAMS IN ARKANSAS

Thomas Johnson,
Cross Connection Control Program Engineer



Too often, mention of the term “Cross-Connection Control Program” elicits yawns, watch-checking and hem-hawing along the lines of, “Yes we watch out for backflow. Now, what’s the next question?” However backflow prevention, cross-connection control and the program to handle these are not a trivial matter. Cross-connections can and **do** lead to backflow events. Backflow events can and **do** lead to contamination of Public Water System (PWS) water and piping networks, which cause at the least boil orders and the expenses of flushing, to the worst case of illnesses and deaths from chemical or biological contaminations.

The impetus for requiring a Cross Connection Control Program (CCCP) for every PWS comes from the Safe Drinking Water Act (SDWA, established 1974), which was established to protect human health from contaminants in drinking water and to prevent the contamination of existing groundwater supplies. This act and its amendments (1986 and 1996) require many actions to protect drinking water and its sources. One of these actions is the installation and maintenance of approved backflow prevention wherever a potential hazard can exist in a given system, as the backflow prevention assembly or air gap prevents a cross-connection. The 1994 revision of the “Arkansas Rules & Regulations Pertaining to Public Water Systems” set out specific requirements for Cross Connection Control Programs.

Some basic definitions follow:

Cross-Connection: Any connection between potable water and any other source of water that combines the two when a backflow condition occurs; typically resulting in contamination of the potable water system.

Backflow: Backflow occurs when the water in your pipes (after the water meter, in your building/facility) goes backward (opposite its normal direction). There are two situations that can cause the water to go backward (backflow):

Backpressure – when the pressure in your pipes is greater than the pressure coming in.

Backsiphonage – when there is a reduction of pressure in the water distribution system.

These are all situations which threaten the safety of a PWS and against which a CCCP protects. Within the past year the ADH Engineering Section has been contacted for assistance with multiple Cross-Connections, such as:

- Uncontrolled connections to chemical feed tanks from fire hydrants,
- Livestock watering tanks with no backflow prevention,
- Poultry production facilities connected to a PWS with no backflow prevention,
- Uncontrolled connections to a building products facility (a softwood sawmill).

Recently a medical facility (dentist office) in Arkansas was found to be pumping air back into its PWS piping. The air was coming from an improperly plumbed vacuum (suction) pump. Fortunately the air was not contaminated with medical substances. There was **no backflow preventer installed** on this service, which allowed this to occur.

A typical CCCP includes the following four (4) elements:

1) **A CCCP Ordinance or Regulation.**

This is an ordinance, regulation, resolution or bylaw that has been approved by the PWS governing body or owner. Having this in place will allow the PWS to take proper action when any new commercial or industrial

connections are made. A “Sample Ordinance” can be found on the ADH web site, or can be provided by ADH Engineering staff.

2) A list of commercial and industrial customers.

Review all water customers and develop a list of all Commercial and Industrial customers. Some examples of these customers on your list would be churches, daycares, barber shops, and the sewer plant. ADH CCCP information can be provided to assist in this matter, to help determine the need for Backflow Prevention Devices or piping to prevent backflow prevention by an air gap.

3) Inspections of commercial and industrial sites.

Survey and/or inspect all customers on the Commercial and Industrial List. Use a form such as the ADH “CROSS CONNECTION CONTROL RECORD OF INSPECTION”, or other suitable form or spreadsheet to document this activity. Keep this information filed. The information should be updated with future inspection results every 5 years for none, or Low-Hazard connections and every 3 years for High-Hazard connections. This needs to be done for every commercial and industrial customer.

This item is the most often one omitted from a PWS CCCP. Keep in mind the dentist office backflow occurrence above for one possible adverse outcome.

4) Backflow prevention assembly installation and testing.

For Commercial and Industrial customers who during the inspections and surveys are determined to need backflow prevention, an approved assembly (e.g. an RPZ or DC) or air gap shall be installed. New assemblies shall be tested within 10 days of installation. A copy of the test report, signed by a certified tester, shall be kept on file at the PWS office. Existing Assemblies shall also be tested annually and a copy of the test report signed by a certified tester shall be kept on file at the PWS office. New Commercial and Industrial customers shall be required to comply with the PWS Cross Connection Control Program.

For more information about backflow protection and Cross-Connection Control Programs see the ADH web site www.healthyarkansas.gov. A search for “cross connection” provides links to many useful documents, listing of licensed backflow assembly testing and repair technicians and backflow prevention reference materials. For more information contact Thomas Johnson at (501) 661-2623 or Thomas.Johnson@arkansas.gov.

Got a Question?

ADH Engineering publishes this newsletter as a source of information to the water system operators and managers in the state of Arkansas. What better way than answering questions submitted directly from water operators and managers? Anyone wishing to submit a question can e-mail their question to jeffery.stone@arkansas.gov or call at 501-661-2623.

Question: Can older water service components be reused after the new “lead free” definition becomes effective on January 14th 2014?

Answer: No. After January 14th, 2014, only components complying with the new “lead free” definition can be used.

Question: After January 14th, 2014, when changing out a meter or repairing a water service, do all older components have to be removed and replaced with new components complying with the new “lead free” definition?

Answer: It is not required to remove all older components and replace them with new components. However, any components that are removed during a repair must be replaced with components that comply with the new “lead free” definition.

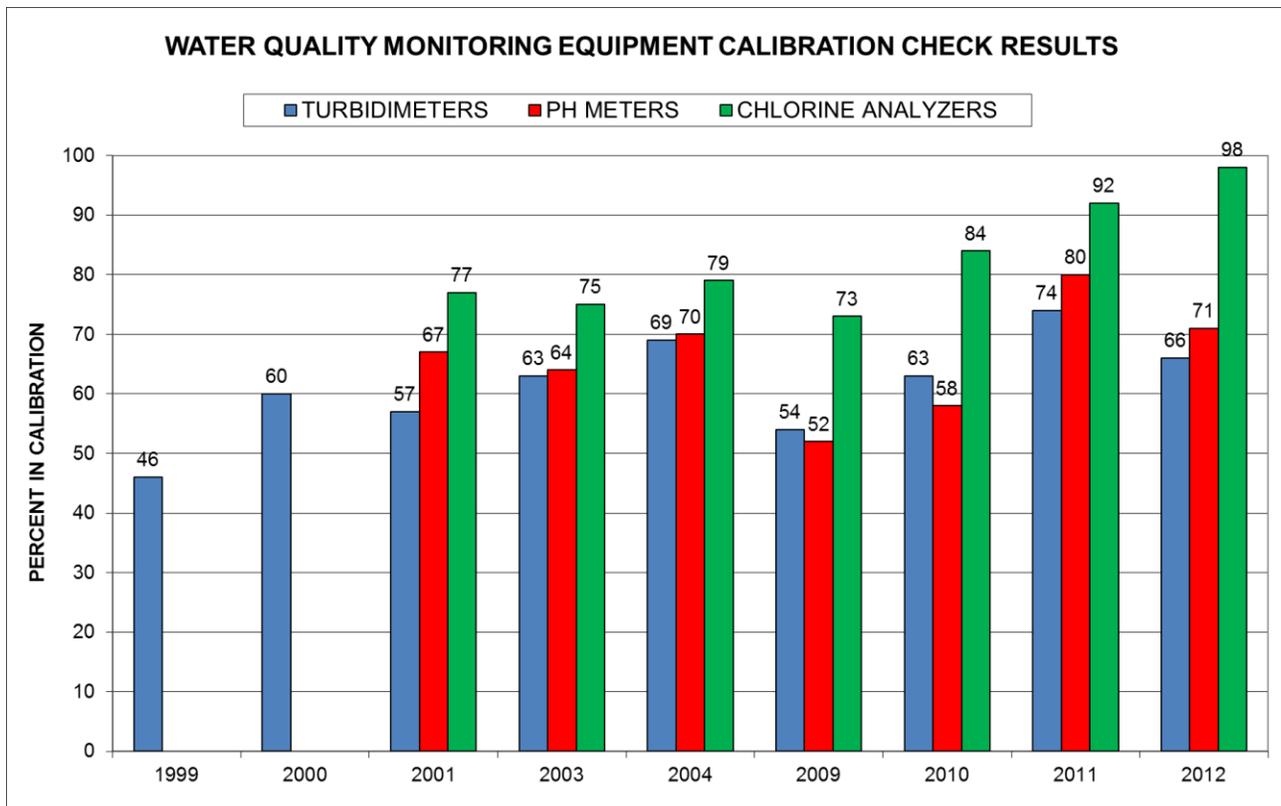
WATER QUALITY MONITORING EQUIPMENT CALIBRATION CHECK PROJECTS

Craig Corder, P.E. Engineer Supervisor

Upon review of Comprehensive Performance Evaluations conducted during 1997 through 1999, the Engineering Section (ES) of the ADH determined that a significant number of the turbidimeters used at surface water treatment plants were not giving accurate results. As a result of this finding, during 9 of the 14 years from 1999 through 2012, the ES has hired college students as temporary employees to work on checking the accuracy of water quality monitoring equipment at surface water treatment plants. The ES is in the process of hiring 2 college students again this summer. Their job duties will include going to surface water treatment plants and checking water quality monitoring equipment (turbidimeters, pH meters, chlorine analyzers) to insure that the water system is collecting accurate data on water quality. They will also assist with collection of investigative or compliance water samples for TOC, THM, HAA and other parameters.

If you have questions or concerns about the accuracy of your water quality monitoring equipment or would like technical assistance related to water quality monitoring, please feel free to contact your District Staff at 501-661-2623, Austin Lee at Austin.Lee@arkansas.gov, or Craig Corder at Craig.Corder@arkansas.gov.

The graph below shows the results of previous calibration check projects. As you can see, there is a need to significantly improve the accuracy of the data from turbidimeters and pH meters.



Major Monitoring, MCL, Treatment Technique, & Licensing Violations

Community & Nontransient Noncommunity Public Water Systems, Oct. – Dec. 2012

Alma Waterworks	BMCL 10	Magazine Waterworks	DBPR 10, 11, 12
Amity Waterworks	DBPR 10, 11, 12	Milltown-Washburn Water Users	DBPR 10, 11, 12
ASP Queen Wilhelmina	DBPR 10, 11, 12	Mountain Pine Waterworks	Bmon 12
ASP Mt Magazine	DBPR 10, 11, 12	Mt Sherman WA	RMCL 10, 11, 12
Banks Waterworks	Bmon 12	NSC International	Bmon 12
Barling Waterworks	Bmon 12	Old Union WA	DBPR 10, 11, 12
Beulah Grove Water	OperLic 10, 11, 12	Ozark Acres WA	BMCL 10
Blue Mountain Waterworks	DBPR 10, 11, 12	Ratcliff Waterworks	DBPR 10, 11, 12
Bodcaw Rural Water	DBPR 10, 11, 12	SDM Water Assn.	RMCL 10, 11, 12
Bowser Water Assn.	Bmon 12	SDM Water Assn.	FMCL 10, 11, 12
Boydell Water Assn.	BMCL 12	Searcy Waterworks	DBPR 10
Bradley Waterworks	GWR 11	South Logan County Water	DBPR 10, 11, 12
Bradley Waterworks	Bmon 12	South Mountain WA	RMCL 10, 11, 12
Branch Waterworks	DBPR 10, 11, 12	Subiaco Academy	Bmon 12
Bryant Waterworks	Bmon 11	Tri-County Water District	BMCL 10
Campbell Station Waterworks	Bmon 12	Vandervoort Waterworks	Bmon 12
Charleston Waterworks	DBPR 10, 11, 12	Waldo Waterworks	DBPR 10
Concord Water & Sewer	Bmon 11	Walker Water Assn.	OperLic 10,11, 12
Cotton Plant Waterworks	BMCL 11	Watson Waterworks	DBPR 10, 11, 12
Danville Waterworks	BMCL 11	Wiederkehr Village Water	Bmon 12
Danville Waterworks	DBPR 10, 11, 12	Wilson Gun Shop	Bmon 10
Delaplaine Waterworks	BMCL 10	Wilton Waterworks	Bmon 12
Denning Waterworks	Bmon 12		
Diaz Waterworks	Bmon 12		
Elkins Waterworks	Bmon 12		
Fouke Waterworks	Bmon 12		
Greenwood	DBPR 10, 11, 12		
Hosanna Heights Water	GWR 10		
Keiser Waterworks	BMCL 12		
Kingwood MHP	BMCL 10		
Lake Bull Shoals Estates	BMCL 12		
Little Portion Hermitage	BMCL 12		

KEY: Bmon = Bacti Monitoring; BMCL = Bacti MCL; Dmon = Disinfection By Product Rule Monitoring; DBPR=Disinfection By Product Rule MCL or Treatment Technique; GWRMCL=GWR Treatment Technique; GWRmon= GWR Monitoring or Reporting; Tmon = SWTR Major Monitoring; TMCL = SWTR Treatment Technique; SWTR= Various SWTR requirements; Failure to Filter; RMCL = Radiochemical MCL; FMCL = Fluoride MCL; IMCL=Inorganic Chemical MCL; SMCL = Synthetic Chemical MCL; OperLic = Operator Licensing; 10 = Oct. 2012, 11 = Nov. 2012, 12 = Dec. 2012

FREE WATER EXAM STUDY MANUALS To Eligible Systems

The Arkansas Department of Health, utilizing EPA Operator Certification Training Funds, will continue to provide free replacement or additional exam study manuals. Systems eligible are all Community Public Water Systems or Non-Community Non-Transient Public Water Systems that serve a retail population of fewer than 3300 persons. The Operator Certification Training Funds provided all the above grant eligible water systems with a complete set of reference manuals in December 2003, see list of the provided manuals below.

If a grant eligible system needs a free replacement or additional set of manuals, please contact the Water Operator Licensing Program by phone at: (501) 661-2623 or by email at: martin.nutt@arkansas.gov to start the simple straight forward process to receive.

Reference Manuals Provided OpCert Fund Eligible Systems	Value
Water Treatment Plant Operation, Volume I, by CSU Sacramento	\$49.00
Water Treatment Plant Operation, Volume II, by CSU Sacramento	\$49.00
Water Distribution System Operation & Maintenance, by CSU Sacramento	\$49.00
Small Water System Operation and Maintenance, by CSU Sacramento	\$49.00
Utility Management, by CSU Sacramento	\$29.00
Manage For Success: Effective Utility Management Practices, by CSUS	\$49.00
Water System Security: A Field Guide by American Water Works Assn	\$65.00
Operator Certification Study Guide by American Water Works Association	\$59.00
Total Value of Set	\$398.00

REPORT OF THE Arkansas Drinking Water Advisory and Operator Licensing Committee

Martin Nutt, Training and Certification Officer

The Arkansas Drinking Water Advisory and Operator Licensing Committee held its quarterly meeting on January 10, 2013 in Lonoke, Arkansas. Committee members present were: Terry House, Committee Chair, Grand Prairie Bayou Two PFB; Susan Merideth, P.E., Committee Chair Elect, Jonesboro City Water and Light; Tim Shaw, Community Water System; Matthew Dunn, P.E., Crist Engineers, Inc.; Stacy Cheevers, Beaver Water District; Findlay Edwards, P.E., University of Arkansas; and Jeff Stone, P.E., Executive Secretary, Arkansas Department of Health (ADH). ADH staff & guests present were: Reginald Rogers, Attorney, ADH; Martin Nutt, Training and Certification Officer, ADH; Ida Hampton, Administrative Specialist, ADH; Alicia Prioleau, Training Coordinator, ADH; Jeremy Rowe, Arkansas Environmental Training Academy (AETA); Dennis Sternberg, AR Rural Water Association (ARWA).

Standing Business

The Committee reviewed and approved the minutes from the October 10, 2012 meeting. Nutt reported that the OpCert Operator Training Grant expired on December 31, 2012. He reminded the Committee that the Section identified EPA SRF Capitalization Grant Set Aside funds to use to continue funding the cost of providing the previously funded OpCert Grant funded mandatory training courses through June 30, 2014, but the SRF funds will not fund meal and lodging costs for students. He stated that EPA approved spending the predicted excess grant funds on training equipment for the Section's operator training efforts. Nutt reported two laptops, two digital projectors, and a CD-Rom duplicator with a two-year supply of needed materials to continue producing the operator licensing information CD-ROM has been purchased. In addition, a two-year supply of reference manuals recommended for exam preparation was purchased to continue furnishing the manuals to eligible systems. He predicted that when all the final expenses against the grant are accounted, the grant would be completely expended.

Old Business

Nutt addressed progress on the Committee's October 2012 Committee meeting recommended changes to the Rules and Regulations Pertaining to Water Operator Licensing. He provided the Committee a copy of the Winter 2012 newsletter article that requested feedback from stakeholders. The article listed the recommended changes and provided justification for the changes (Also, see related article on page 11). He reported the Section wanted to give the operator community adequate time to comment before developing final proposed regulation changes. He then reviewed the administrative procedures for regulation approval, which takes a minimum of nine months.

New Business

The Committee, at the Section's request, reviewed the present Regulations Pertaining to Water Operator Licensing. Most of the reviews centered on ways to better clarify the Regulations intention. The Committee agreed to these recommended significant changes: 1) Add a definition defining "Supervisory" as it pertains to license level requirements. 2) Require Regional Water Systems' Distribution license determinations be based on total population served by the system. 3) Strike from the regulation the language that allows the waiver of mandatory training requirements if classes "were not geographically available" citing the availability of classes. The Committee agreed with raising licensing fees to cover documentable license program cost. The Committee did not support Section recommendations to require the obtaining of the lower-grade license prior to obtaining the higher-grade license, limiting the number of times the same license grade exam is allowed to be taken, or requiring a minimum period between license exams.

Committee Reports

Stone provided the Committee an update on the fluoridation mandate's implementation, since the last committee meeting. He stated that all affected systems were being required to apply for the Delta Dental Foundation grant. He reported that six had initiated fluoridation, and three would initiate fluoridation shortly. He reported that the Consumer Confidence Report guidance requirements were changed to allow greater use of

the internet for dissemination of the reports in lieu of printing and mailing them. The Section's CCR staff is developing methods to incorporate the new guidelines in the CCR's it provides to systems.

Nutt provided a Licensing Program report. He referenced a spreadsheet handout titled Water License Exam Report pointing out where the present exams scoring performance was shown on the spreadsheet and where to compare those results with the previous exam version and overall exam performance. He noted the continued troubling performance of the upper license grades. He reviewed a summary of compliance enforcement efforts taken by the Section noting several systems nearing an administrative penalty hearing. He concluded his report by noting the program was processing exam results and license applications very timely.

Rowe provided the Arkansas Environmental Training Academy Report. He reported AETA's construction of a new environmental training lab was progressing. He concluded, by reporting classes were to be held as scheduled.

Sternberg provided the Arkansas Rural Water Association Report. He provided a hand out providing statistical training data for the calendar year 2012 and made available the 2013 training calendar mailed to water systems.

The Committee confirmed their next meeting date for April 11, 2013. The Committee received an adjournment motion and adjourned.

Possible Water Licensing Regulations Revisions

Martin Nutt, Training and Certification Officer

The Arkansas Drinking Water Advisory and Operator Licensing Committee accepted the Mandatory Training Adequacy Workgroup's recommendations at their October 10, 2012 Committee meeting. The Committee advised the Engineering Section to address the recommended changes. Those changes were detailed in the Winter 2012 edition of this newsletter. In that article, the Section requested industry stakeholder input and constructive comments prior to proposing actual licensing regulation changes. Very few comments were received and your comments are still being sought.

Briefly, the recommended changes under consideration for licensing regulation revision are:

- Combine Basic Math, and Applied Math courses into one 16-hour math course.
- Expand Intermediate and Advance Treatment and Distribution courses to 32 hours.
- Require Advanced Distribution course for Distribution 3 exam.
- Expand the 8-hour Compliance course.
- Require courses be attended in a defined order with compliance course last.
- Hold exam sessions the following day after compliance courses.
- Not allow attendance of the mandatory courses strictly for license renewal training.

The winter 2012 newsletter, with the original article providing greater details and justifications for the changes is available on the internet at: www.healthy.arkansas.gov/eng. Click on "Drinking Water" link, then "Publications" link.

The Engineering Section requests comments in written form, preferably with commenter's name and contact information. Please submit comments to:

Martin Nutt, Training and Certification Office; Engineering Section, Slot 37; Arkansas Department of Health; 4815 West Markham; Little Rock, AR 72209

Comments may also be emailed to: martin.nutt@arkansas.gov

Water Licenses Renew

Do you have your renewal hours obtained or planned? Renewal notices for water licenses will be mailed in late May 2013. Must have 24 contact hours of approved training, at least 12 of the hours must be approved as direct water operator training. The other 12 can be more direct or indirect training. Some training may be documented at: https://health.arkansas.gov/wa_engTraining/hours.aspx

If more renewal hours are needed, find renewal training schedules at: <http://www.healthy.arkansas.gov/eng/autoupdates/oper/opcertlinks.htm>

Water Operator Licenses Issued

December 1, 2012 through February 28, 2013

LICENSEE NAME	GRADE/TYPE	WATER SYSTEM NAME
ADAMS BRADLEY	D - IV	HELENA WATER SEWER LONG LAKE WATER ASSOCIATION
BASCO DONNA	D - I	PERLA WATER ASSOCIATION
BOWMAN SABRINA	T - IV	BEAVER WATER DISTRICT
BREEDLOVE MICHAEL	T - III	MARION COUNTY REG WATER DIST
CARTER JOSEPH	D - IV	NE YELL COUNTY WATER ASSOC
CHADWICK KEVIN	D - IV	JONESBORO WATER SYSTEM
DAY JOSEPH	T - II	DANVILLE WATERWORKS CHAMBERLYNE COUNTRY CLUB
FARAG MARK	D - I	EL DORADO WATERWORKS
FOSTER JONATHAN	T - IV	MENA WATER DEPT
GRIMES CHARLES	D - I	WALKER CREEK STATELINE RWA
HARVEY RANDAL	D - IV	CITY CORPORATION
LAMBERT KEITH	D - I	WALDO WATERWORKS
MANLEY SAWYER	T - IV	MENA WATER DEPT
MARRS DANNY	D - I	TYRONZA WATERWORKS
MCFARLAND BLAKE	D - IV	JONESBORO WATER SYSTEM
MORRIS JESSE	D - I	BUFFALO NRVU4-06 UPPER PRUITT
MURRAY ROBERT	D - III	POCAHONTAS WATERWORKS
NYANDER TIMOTHY	D - III & T - II	FAYETTEVILLE WATERWORKS
PAGE CLIFFORD	T - II	TAYLOR WATERWORKS WALKER CREEK STATELINE RWA
PASSMORE MAURICE	T - IV	CLINTON WATERWORKS
REYNOLDS JASON	D - IV & T - IV	N GARLAND CO REG WATER DIST
ROSS BRANDON	T - IV	SILOAM SPRINGS WATERWORKS
RUTH JUSTIN	T - I	LOCKESBURG WATERWORKS
SPARKS JASON	D - IV	CLARKSVILLE WATERWORKS
WEAVER ERIC	D - I	OXFORD WATERWORKS
WOOTEN RONNIE	D - IV	JONESBORO WATER SYSTEM

ARWA Annual Technical Conference & Exhibition

Hot Springs Convention Center

September 15 – 17, 2013

Hot Springs, Arkansas

www.arkansasruralwater.org

The conference consists of two (2) full days of training. ARWA plans to have six (6) training topics offered each session, with four sessions each day. Typically, no training topic is repeated. There will be an exhibit hall with a wide selection of water industry related companies displaying their latest and best products. Conference attendees receive a total of 16 hours of directly applicable water training credit approved for full participation. The Association will be scanning name badges each morning and afternoon during training session to determine training hour credit.

No Exam Session will be offered at the conclusion of the conference. No Mandatory water training courses for exam purposes will be offered during this conference.

Mandatory Training Course Schedule

Most Current Listing is at: www.healthy.arkansas.gov/eng/autoupdates/oper/mandtrngall.htm.

Please contact the course sponsor to register for course well in advance of course date.

(Please note all mandatory courses begin at 8:00 a.m.)

Mandatory Course Name	START DATE	ENDING DATE	Time	CITY	LOCATION	SPONSOR
Basic Water Math	04/01/13	04/15/13	TBD	Internet	http://www.sautech.edu/admin/escience.aspx	AETA
Advanced Water Distribution	04/02/13	04/04/13	8:00 AM	N Little Rock	CAW Maryland Complex, 1500 W Maryland Ave	AETA
Basic Water Treatment (Night Class)	04/08/13	04/23/13	8:00 AM	Fort Smith	Fort Smith Utilities, 3900 Kelly Hwy	AETA
Basic Water Distribution	04/09/13	04/11/13	8:00 AM	Russellville	Tri-County Water, 5306 N Arkansas Ave	AETA
Basic Water Distribution (Night Class)	04/15/13	04/19/13	8:00 AM	Osceola	Osceola-Plum Point Energy Station	AETA
Applied Water Math	04/15/13	04/30/13	TBD	Internet	http://www.sautech.edu/admin/escience.aspx	AETA
Basic Math	04/23/13	04/23/13	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Applied Math	04/24/13	04/24/13	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
ADH Compliance	04/25/13	04/25/13	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ADH
Basic Water Math (AWW&WEA Conf)	04/29/13	04/29/13	8:00 AM	Hot Springs	AWW&WEA Conf, HS Convention Center	AETA
PWS Compliance (AWW&WEA Conf)	04/30/13	04/30/13	8:00 AM	Hot Springs	AWW&WEA Conf, HS Convention Center	ADH
Applied Water Math (AWW&WEA Conf)	04/30/13	04/30/13	8:00 AM	Hot Springs	AWW&WEA Conf, HS Convention Center	AETA
Intermediate Treatment	04/30/13	05/02/13	8:00 AM	Arkadelphia	Recreation Center, 2555 Twin Rivers Dr.	ARWA
Basic Water Treatment	05/01/13	05/15/13	TBD	Internet	http://www.sautech.edu/admin/escience.aspx	AETA
Intermediate Water Distribution	05/07/13	05/09/13	8:00 AM	Jonesboro	Jonesboro CWL Office Training Rm, 400 E Monroe	AETA
Advanced Distribution	05/07/13	05/09/13	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Basic Water Distribution	05/15/13	05/30/13	TBD	Internet	http://www.sautech.edu/admin/escience.aspx	AETA
Basic Water Treatment (Night Class)	05/20/13	05/24/13	8:00 AM	Osceola	Osceola-Plum Point Energy Station	AETA
Intermediate Distribution	05/21/13	05/23/13	8:00 AM	Clarksville	CLW (Operations Bldg) 710 East Main (Hwy 64 East)	ARWA
Basic Water Math	05/28/13	05/28/13	8:00 AM	Fayetteville	Utilities Operations Center, 2435 S Industrial Dr	AETA
Applied Water Math	05/29/13	05/29/13	8:00 AM	Fayetteville	Utilities Operations Center, 2435 S Industrial Dr	AETA
PWS Compliance	05/30/13	05/30/13	8:00 AM	Fayetteville	Utilities Operations Center, 2435 S Industrial Dr	ADH
Intermediate Water Treatment	06/01/13	06/15/13	TBD	Internet	http://www.sautech.edu/admin/escience.aspx	AETA
Basic Water Distribution (Night Class)	06/03/13	06/20/13	8:00 AM	Fort Smith	Fort Smith Utilities, 3900 Kelly Hwy	AETA
Advanced Water Treatment	06/04/13	06/06/13	8:00 AM	N Little Rock	CAW Maryland Complex, 1500 W Maryland Ave	AETA
Basic Distribution	06/04/13	06/06/13	8:00 AM	Bono	Bono Community Center, 100 Woodland Trail	ARWA
Basic Math	06/11/13	06/11/13	8:00 AM	Mt. Home	Charles R Newton Emer Serv Trng Center, Midway	ARWA
Basic Water Distribution	06/11/13	06/13/13	8:00 AM	Camden	AR Env Training Academy, 100 Carr Road	AETA
ADH Compliance	06/12/13	06/12/13	8:00 AM	Mt. Home	Charles R Newton Emer Serv Trng Center, Midway	ADH
Applied Math	06/13/13	06/13/13	8:00 AM	Mt. Home	Charles R Newton Emer Serv Trng Center, Midway	ARWA
Intermediate Water Distribution	06/15/13	06/30/15	TBD	Internet	http://www.sautech.edu/admin/escience.aspx	AETA
Basic Treatment	06/18/13	06/20/13	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Advanced Water Treatment	07/01/13	07/15/13	TBD	Internet	http://www.sautech.edu/admin/escience.aspx	AETA
Basic Water Treatment	07/09/13	07/11/13	8:00 AM	N Little Rock	CAW Maryland Complex, 1500 W Maryland Ave	AETA
Advanced Treatment	07/09/13	07/11/13	8:00 AM	Arkadelphia	Recreation Center, 2555 Twin Rivers Dr.	ARWA
Advanced Water Distribution	07/15/13	07/30/13	TBD	Internet	http://www.sautech.edu/admin/escience.aspx	AETA
Intermediate Distribution	07/16/13	07/18/13	8:00 AM	Bono	Bono Community Center, 100 Woodland Trail	ARWA
Intermediate Treatment	07/23/13	07/25/13	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Basic Water Distribution	07/23/13	07/25/13	8:00 AM	Fayetteville	Utilities Operations Center, 2435 S Industrial Dr	AETA
Intermediate Water Treatment	07/30/13	08/01/13	8:00 AM	Russellville	Tri-County Water, 5306 N Arkansas Ave	AETA
Basic Water Math	08/01/13	08/15/13	TBD	Internet	http://www.sautech.edu/admin/escience.aspx	AETA
Basic Distribution	08/06/13	08/08/13	8:00 AM	Mt. Home	Charles R Newton Emer Serv Trng Center, Midway	ARWA
Applied Water Math	08/15/13	08/30/13	TBD	Internet	http://www.sautech.edu/admin/escience.aspx	AETA
Advanced Water Treatment	08/20/13	08/22/13	8:00 AM	Lowell	Beaver Water Dist, 301 N Primrose Rd	AETA
Advanced Distribution	08/20/13	08/22/13	8:00 AM	Bono	Bono Community Center, 100 Woodland Trail	ARWA
Intermediate Water Distribution	08/20/13	08/22/13	8:00 AM	Fayetteville	Utilities Operations Center, 2435 S Industrial Dr	AETA
Basic Water Treatment	08/27/13	08/29/13	8:00 AM	Paragould	Holiday Inn Express, 3502 Linwood Dr	AETA
Basic Math	08/27/13	08/27/13	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Applied Math	08/28/13	08/28/13	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
ADH Compliance	08/29/13	08/29/13	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ADH
Basic Water Treatment	09/01/13	09/15/13	TBD	Internet	http://www.sautech.edu/admin/escience.aspx	AETA
Basic Treatment	09/10/13	09/12/13	8:00 AM	Nashville	Carter Day Center, 200 Nichols Drive	ARWA
Intermediate Water Treatment	09/10/13	09/12/13	8:00 AM	Jonesboro	Jonesboro CWL Office Training Rm, 400 E Monroe	AETA

Basic Water Distribution	09/15/13	09/30/13	TBD	Internet	http://www.sautech.edu/admin/escience.aspx	AETA
Basic Water Math	09/17/13	09/17/13	8:00 AM	Maumelle	Wastewater Plant Training Rm, 425 B Hyman Drive	AETA
Applied Water Math	09/18/13	09/18/13	8:00 AM	Maumelle	Wastewater Plant Training Rm, 425 B Hyman Drive	AETA
PWS Compliance	09/19/13	09/19/13	8:00 AM	Maumelle	Wastewater Plant Training Rm, 425 B Hyman Drive	ADH
Basic Distribution	09/24/13	09/26/13	8:00 AM	West Fork	Wenzel Community Center, 222 Webber	ARWA
Advanced Water Distribution	09/24/13	09/26/13	8:00 AM	Hot Springs	HS Transportation Depot, 100 Broadway Terrace	AETA
Intermediate Water Treatment	10/01/13	10/15/13	TBD	Internet	http://www.sautech.edu/admin/escience.aspx	AETA
Intermediate Distribution	10/08/13	10/10/13	8:00 AM	Mt. Home	Charles R Newton Emer Serv Trng Center, Midway	ARWA
Basic Water Math	10/08/13	10/08/13	8:00 AM	Russellville	Tri-County Water, 5306 N Arkansas Ave	AETA
Applied Water Math	10/09/13	10/09/13	8:00 AM	Russellville	Tri-County Water, 5306 N Arkansas Ave	AETA
PWS Compliance	10/10/13	10/10/13	8:00 AM	Russellville	Tri-County Water, 5306 N Arkansas Ave	ADH
Intermediate Water Distribution	10/15/13	10/30/13	TBD	Internet	http://www.sautech.edu/admin/escience.aspx	AETA
Basic Math	10/22/13	10/22/13	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Intermediate Water Treatment	10/22/13	10/24/13	8:00 AM	N Little Rock	CAW Maryland Complex, 1500 W Maryland Ave	AETA
Applied Math	10/23/13	10/23/13	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
ADH Compliance	10/24/13	10/24/13	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ADH
Advanced Treatment	10/29/13	10/31/13	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Advanced Water Treatment	11/01/13	11/15/13	TBD	Internet	http://www.sautech.edu/admin/escience.aspx	AETA
Basic Water Distribution	11/05/13	11/07/13	8:00 AM	Camden	AR Env Training Academy, 100 Carr Road	AETA
Intermediate Treatment	11/05/13	11/07/13	8:00 AM	Nashville	Carter Day Center, 200 Nichols Drive	ARWA
Advanced Distribution	11/12/13	11/14/13	8:00 AM	Mt. Home	Charles R Newton Emer Serv Trng Center, Midway	ARWA
Basic Treatment	11/12/13	11/14/13	8:00 AM	Fayetteville	Utilities Operations Center, 2435 S Industrial Dr	AETA
Advanced Water Distribution	11/15/13	11/30/13	TBD	Internet	http://www.sautech.edu/admin/escience.aspx	AETA
Basic Distribution	11/19/13	11/21/13	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Advanced Water Treatment	11/19/13	11/21/13	8:00 AM	Maumelle	Wastewater Plant Training Rm, 425 B Hyman Drive	AETA
Basic Water Math	12/01/13	12/15/13	TBD	Internet	http://www.sautech.edu/admin/escience.aspx	AETA
Applied Water Math	12/01/13	12/15/13	TBD	Internet	http://www.sautech.edu/admin/escience.aspx	AETA
Basic Treatment	12/03/13	12/05/13	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Advanced Treatment	12/10/13	12/12/13	8:00 AM	Nashville	Carter Day Center, 200 Nichols Drive	ARWA
Basic Math	12/17/13	12/17/13	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Intermediate Water Distribution	12/17/13	12/19/13	8:00 AM	Camden	AR Env Training Academy, 100 Carr Road	AETA
ADH Compliance	12/18/13	12/18/13	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ADH
Applied Math	12/19/13	12/19/13	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA

The most current Mandatory Training Schedule with location information is available at
<http://www.healthy.arkansas.gov/eng/autoupdates/oper/mandtrngall.htm>

Arkansas Water Works & Water Environment Association

Annual Conference and Short School

April 28 to May 1, 2012

Hot Springs Convention Center

Hot Springs, Arkansas

www.awwwea.org

Attendance at the conference can earn you up to 16 contact hours of directly applicable water license training credit for full participation in the conference. The conference consists of two full days of training with six sessions each day providing 12 concurrent training topics per session. The exhibit hall Sunday afternoon through Tuesday morning will have water industry related companies displaying their products.

The Conference will be tracking attendance credit hours by scanning your conference badge barcode at stations Monday and Tuesday with a morning and afternoon scan. You must scan each morning and afternoon to receive full credit.

If you are working on Mandatory Training courses for exam purposes, the conference offers the Basic Water Math course on Monday and either the Applied Water Math course or the ADH Public Water System Compliance course on Tuesday. You must register for the conference to attend the courses. They begin at 8:00 each morning and end at 5:00 each afternoon, with a shortened lunch break. Attendance of the entire course is required to receive a course completion certificate.

WATER OPERATOR LICENSE EXAMINATIONS

JANUARY 2013 – DECEMBER 2013 SCHEDULE

The most current Exam Schedule is at: <http://www.healthy.arkansas.gov/eng/autoupdates/oper/operexam.htm>

Listed below are the dates and locations of examination sessions as scheduled, as of **December 12, 2012**. All Treatment and Distribution exam grades will be available at the sessions. Acceptable photo identification (Driver's License or equivalent) will be required to sit for an Exam. Cell phones, pagers and other electronic communication devices are not allowed. Non-Programmable calculators are allowed in exam sessions.

DATE	CITY	LOCATION	TIME
4/5/2013	N Little Rock	CAW Maryland Complex, 1500 West Maryland Ave	9:00:00 AM
4/12/2013	Russellville	Tri-County Water, 5306 N Arkansas Ave	9:00:00 AM
5/1/2013	Hot Springs	AWW&WEA Annual Conf, HS Convention Center	9:00:00 AM
5/3/2013	Arkadelphia	Recreation Center, 2575 Twin Rivers Dr	9:00:00 AM
5/10/2013	Jonesboro	Jonesboro CWL Office Training Room, 400 E Monroe	9:00:00 AM
5/10/2013	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	9:00:00 AM
5/24/2013	Clarksville	CLW (Operations Bld) 710 East Main (Hwy 64 East)	9:00:00 AM
6/7/2013	Bono	Bono Community Center, 100 Woodland Trail	9:00:00 AM
6/7/2013	N Little Rock	CAW Maryland Complex, 1500 West Maryland Ave	9:00:00 AM
6/14/2013	Camden	AR Environmental Training Academy, 100 Carr Road	9:00:00 AM
6/21/2013	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	9:00:00 AM
7/12/2013	N Little Rock	CAW Maryland Complex, 1500 West Maryland Ave	9:00:00 AM
7/12/2013	Arkadelphia	Recreation Center, 2575 Twin Rivers Dr	9:00:00 AM
7/19/2013	Bono	Bono Community Center, 100 Woodland Trail	9:00:00 AM
7/26/2013	Fayetteville	Fayetteville Operations Center, 2435 S Industrial Dr	9:00:00 AM
7/26/2013	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	9:00:00 AM
8/2/2013	Russellville	Tri-County Water, 5306 N Arkansas Ave	9:00:00 AM
8/9/2013	Mtn Home	Baxter Co OEM Training Facility, 170 Dillard Dr, Midway	9:00:00 AM
8/23/2013	Bono	Bono Community Center, 100 Woodland Trail	9:00:00 AM
8/23/2013	Fayetteville	Fayetteville Ops Center, 2435 S Industrial Dr (Includes Lowell)	9:00:00 AM
8/30/2013	Paragould	Holiday Inn Express, 3502 Linwood Dr	9:00:00 AM
9/13/2013	Jonesboro	Jonesboro CWL Office Training Rm, 400 E Monroe	9:00:00 AM
9/13/2013	Nashville	Carter Day Center, 200 Nichols Drive	9:00:00 AM
9/27/2013	West Fork	Wenzel Community Center, 222 Webber, West Fork, AR	9:00:00 AM
9/27/2013	Hot Springs	HS Transportation Depot, 100 Broadway Terrace	9:00:00 AM
10/11/2013	Mtn Home	Baxter Co OEM Training Facility, 170 Dillard Dr, Midway	9:00:00 AM
10/25/2013	N Little Rock	CAW Maryland Complex, 1500 West Maryland Ave	9:00:00 AM
11/1/2013	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	9:00:00 AM
11/8/2013	Camden	AR Environmental Training Academy, 100 Carr Road	9:00:00 AM
11/8/2013	Nashville	Carter Day Center, 200 Nichols Drive	9:00:00 AM
11/15/2013	Fayetteville	Fayetteville Operations Center, 2435 S Industrial Dr	9:00:00 AM
11/15/2013	Mtn Home	Baxter Co OEM Training Facility, 170 Dillard Dr, Midway	9:00:00 AM
11/22/2013	Maumelle	Wastewater Plant, 425 B Hyman Drive	9:00:00 AM
11/22/2013	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	9:00:00 AM
12/6/2013	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	9:00:00 AM
12/13/2013	Nashville	Carter Day Center, 200 Nichols Drive	9:00:00 AM
12/20/2013	Camden	AR Environmental Training Academy, 100 Carr Road	9:00:00 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 session or its location by contacting your District Specialist or Engineer at (501) 661-2623. Also, the latest exam schedule information can be viewed on the Internet at:

< <http://www.healthy.arkansas.gov/eng/autoupdates/oper/operexam.htm> >.

Please verify that your license application has been filed with this office 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 before taking an exam. Copies of your training documentation must be provided to the exam proctor.

Return Service Requested

PRINTED ON RECYCLED PAPER

AWW&WEA District Meetings

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

DATE	TIME	CITY	LOCATION	SPONSOR
<u>April 2013</u>				
4	5:00 PM	Benton	Browns	Central District, AWW&WEA
4	5:30 PM	Fort Smith	Golden Corral	Western District, AWW&WEA
10	8:30 AM	Lincoln	Lincoln Community Center	Northwest District, AWW&WEA
11	5:00 PM	Russellville	Western Sizzlin	AR Valley District, AWW&WEA
11	5:00 PM	Pleasant Plains	Tadpole's Catfish Barn	North Central District, AWW&WEA
No Meeting				Eastern District, AWW&WEA
No Meeting				Southeast District, AWW&WEA
18	10:30	Jonesboro	CWL Service Bldg.	Northeast District, AWW&WEA
25	5:30 PM	Magnolia	Ole Feed House	Southwest District, AWW&WEA
<u>May 2013</u>				
2	5:00 PM	Conway	Church of the Nazarene	Central District, AWW&WEA
No Meeting				Western District, AWW&WEA
No Meeting				Northwest District, AWW&WEA
9	5:30 PM	Russellville	Western Sizzlin	AR Valley District, AWW&WEA
9	5:00 PM	Pleasant Plains	Tadpole's Catfish Barn	North Central District, AWW&WEA
9	5:00 PM	Stuttgart	Stuttgart Art Center	Eastern Central District, AWW&WEA
16	12:30 PM	Pocahontas	Old Hickory BBQ	Northeast District, AWW&WEA
21	6:00 PM	Watson Chapel	Watson Chapel Water Shop	Southeast District, AWW&WEA
23	5:30 PM	Arkadelphia	Western Sizzlin	Southwest District, AWW&WEA
<u>June 2013</u>				
6	5:30 PM	Jacksonville	Bethel Baptist Church	Central District, AWW&WEA
6	5:00 PM	Fort Smith	Columbus Acres	Western District, AWW&WEA
6	5:00 PM	Wynne	Kellys Restaurant	Eastern District, AWW&WEA
12	8:30 AM	Green Forrest	Green Forrest Middle School	Northwest District, AWW&WEA
13	8:30 AM	Russellville	Western Sizzlin	AR Valley District, AWW&WEA
13	5:00 PM	Pleasant Plains	Tadpole's Catfish Barn	North Central District, AWW&WEA
18	5:00 PM	Monticello	Western Sizzlin	Southeast District, AWW&WEA
20	12:30 PM	Piggott	Piggott Country Club	Northeast District, AWW&WEA
27	5:30 PM	Foreman	Foreman Community Ctr.	Southwest District, AWW&WEA