



# ARKANSAS DRINKING WATER UPDATE

## EPA Issues Updated Lead and Copper Rule Sampling Recommendations

During the end of February, the Environmental Protection Agency (EPA) issued a memorandum containing clarification of recommendations for lead and copper sampling procedures. This memorandum is a part of EPA’s increased focus on compliance with the Lead and Copper Rule. EPA states that “EPA is providing these recommendations for Lead and Copper Rule tap samples to better reflect the state of knowledge about the fate and transport of lead in distribution systems.”

The memorandum focuses on three aspects of sample collection. These aspects are: a) removal and cleaning of aerators, b) pre-stagnation flushing, and c) bottle configuration.

**Removal and Cleaning of Aerators:** One element of sample collection that has been much discussed over the years is the issue of whether or not to remove sample tap aerators when lead and copper rule samples are collected. EPA attempted to resolve this issue in 2006 when it issued the memorandum titled “Management of Aerators during Collection of Tap Samples to Comply with the Lead and Copper Rule” on October 20, 2006. This document can be located using the search function at this location <http://www.epa.gov/nscep>. This memorandum indicates that sample tap aerators should not be removed or cleaned prior to collection of lead and copper samples. It is understood that doing so may reduce the lead results from the samples. In the memorandum issued in late February, 2016, EPA reiterated this position.

**Pre-Stagnation Flushing:** Some systems nationwide have recommended to participating customers to flush their tap before beginning the minimum 6-hour stagnation time required for the lead and copper rule samples. In the memorandum, issued in late February 2016, EPA indicates that pre-stagnation flushing may potentially lower the lead levels as compared to when it is not

practiced. Therefore, EPA recommends that sampling instructions not contain a pre-stagnation flushing step.

**Bottle Configuration:** EPA recommends that wide-mouth bottles be used to collect lead and copper compliance samples. EPA indicates that wide-mouth bottles offer advantages over narrow-necked bottles because wide-mouth bottles allow for a higher flow rate during sample collection which is more representative of the flow that a consumer may use to fill up a glass of water.

The Arkansas Department of Health intends to assist water systems in incorporating these recommendations into the lead and copper sampling procedures. In fact, the Arkansas Department of Health already does. Since the memorandum of 2006, ADH has not recommended removal aerators from taps, pre-stagnation flushing is not a component of the sampling instructions provided to water systems, and the Arkansas Department of Health supplies wide-mouth bottles for lead and copper sample collection.

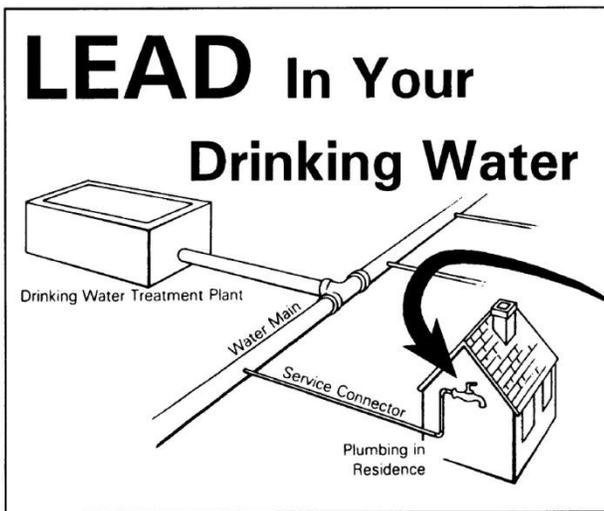
The purpose of sampling instructions is to obtain samples and sample results that accurately indicate the levels of lead that build up in the stagnant water over at least a minimum 6-hour period. This represents the build-up that might typically occur when a family uses water in the evening and then again in the morning after they have slept. Water systems should work with customers to collect samples in the proper way. Taking any actions designed to obtain a lower sample result is inappropriate. A copy of the EPA memorandum from February 2016 can be found here

[https://www.epa.gov/sites/production/files/2016-02/documents/epa\\_lcr\\_sampling\\_memo\\_dated\\_february\\_29\\_2016\\_508.pdf](https://www.epa.gov/sites/production/files/2016-02/documents/epa_lcr_sampling_memo_dated_february_29_2016_508.pdf)

Inside the <i>Update</i>	Page
Understanding Lead Issues	2
UCMR3 Summary	3
Pesticide Disposal	5
Wellhead Surveys	6
Licensing Committee Report	8

# Helping Consumers Understand Lead Issues

Jeff Stone, P.E., Director, Engineering Section



The Lead and Copper Rule was issued by EPA back in 1991. Since then the sampling requirements of this rule have become a routine part of water quality monitoring. The recent events in Flint, Michigan have focused new attention to the issues of lead in the drinking water and raised public concern. The result can be that water system managers and health officials are thrust into the role of having to educate consumers about issues relating to lead in drinking water. Fortunately, there are documents available that can assist in this effort. The graphic above was taken from an EPA education document prepared in 1993 and titled "Lead in Your Drinking Water: Actions You Can Take to Reduce Lead in Drinking Water". This document is available at their website and can be found at <http://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=20001R4V.txt>

Water system managers are encouraged to review this document as well as similar documents made available by EPA and consider making these available in the water office to consumers that inquire about lead issues.

Perhaps it would be good to also take a look back at how lead might get into the drinking water, how the Lead and Copper Rule came about, and what it was intended to accomplish.

Historically, lead has been utilized in manufacture of piping used to convey water, especially within home plumbing systems and service lines. Use of lead piping goes back to early water systems constructed by the Romans

and lead piping was routinely used as recently as the early 1900's.

Lead was and is a popular material to use because of its malleability (ability to be shaped without breaking or cracking). Even though pure lead piping has not been commonly used since the 1930's, lead can still be found as a part of the chemical composition of copper tubing and brass and bronze components utilized in waterworks and plumbing materials. This is because the presence of lead in these materials improves their machinability and durability. However, over time, the industry has reduced the lead content in these products in an effort to reduce consumer's exposure to lead. In 1986, a federal law was passed limiting lead content of these products to 8%. In 2011, a federal law was passed further reducing lead content of these products to 0.25 % (wetted surfaces).

When the Lead and Copper Rule was issued in 1991, it was understood that:

- \* Lead was rarely present in the water system source nor in the water distribution system
- \* Rather, lead was occasionally present in the water in homes and buildings due to corrosion in plumbing systems
- \* Some water systems provided more corrosive water than others
- \* When corrosion occurred, the source of lead was usually privately owned plumbing rather than publicly owned distribution piping
- \* Lead exposure through drinking water was estimated to be 10% to 20% of overall exposure that people experience.

The thrust of the Lead and Copper Rule issued in 1991 is to use lead and copper sampling in private homes to determine if corrosion is imparting significant amounts of lead and copper into the drinking water. If so, the drinking water system is required to conduct public education regarding lead exposure and to demonstrate that they are controlling corrosion. Control of corrosion may take the form of pH adjustment or addition of a corrosion inhibitor chemical. Ongoing monitoring is a part of the requirements.

Public education materials focus not only on informing consumers of the harmful effects of lead exposure but also indicates things the consumer can do to limit their exposure. The EPA document referenced at the beginning of this article does both and can be printed out and provided to customers that inquire about these

issues. Some highlights of this document are as follows:

**Health Threats From Lead** Too much lead in the human body can cause serious damage to the brain, kidneys, nervous system, and red blood cells. You have the greatest risk...if you are a young child, or if you are pregnant.

**Does Lead Affect Everyone Equally?** Young children, infants, and fetuses appear to be particularly vulnerable to lead poisoning. A dose of lead that would have little effect on an adult can have a big effect on a small body. Also, growing children will more rapidly absorb any lead they consume. A child's mental and physical development can be irreversibly stunted by over-exposure to lead. In infants, whose diet consists of liquids made with water – such as baby formula – lead in drinking water makes up an even greater proportion of total lead exposure (40 to 60 percent).

**Only Use Cold Water for Consumption** Use only water from the cold-water tap for drinking, cooking, and especially for making baby formula. Hot water is likely to contain higher levels of lead (due to hot water being more corrosive).

**Flush Your Pipes Before Drinking** Anytime the water in a particular faucet has not been used for six hours or longer, “flush” your cold-water pipes by running the water until it becomes as cold as it will get. The more time that water has been sitting in your home's pipes, the more lead it may contain.

**Have Your Water Tested** The only way to be sure of the amount of lead in your household water is to have it tested by a competent laboratory. Testing typically costs between \$20 and \$100.

**How Do I Have My Water Tested?** Water samples from the tap will have to be collected and sent to a qualified laboratory for analysis. You may find a qualified testing company under “Laboratories” in the yellow pages of your telephone directory.

**Does my home's age make a difference?** Lead-contaminated drinking water is most often a problem in houses that are either very old or very new. Up through the early 1900's, it was common practice, in some areas of the country, to use lead

pipes for interior plumbing. Also, lead piping was often used for the service connections that join residences to public water supplies. Plumbing installed before 1930 is most likely to contain lead. Copper pipes have replaced lead pipes in most residential plumbing. However, use of lead solder with copper pipes was widespread (up until 1986). Experts regard this lead solder as the major cause of lead contamination of household water in U.S. homes today. New brass faucets and fittings can also leach lead, even though they are “lead-free.” Scientific data indicate that the newer the home, the greater the risk of lead contamination. Lead levels decrease as a building ages. This is because, as time passes, mineral deposits form a coating on the inside of the pipes (if the water is not corrosive). This coating insulates the water from the solder. But, during the first five years (before the coating forms) water is in direct contact with the lead. (**Note:** Lead solder was banned in 1986 and theoretically plumbing systems constructed with lead solder should now be almost 30 years old.)

**What If I Use A Private Well?** If you own a well or another water source, you can treat the water to make it less corrosive. Corrosion control devices for individual households include calcite filters and other devices. Calcite filters should be installed in the line between the water source and any lead service connections or lead-soldered pipe.

Homeowners should also be reminded that when they purchase plumbing parts to conduct repairs on their home plumbing, they should make sure and purchase parts that meet the current lead free definition. Parts that meet the current lead free definition should be marked as being in compliance with National Sanitation Foundation Standard No. 372 or Annex G of National Sanitation Foundation Standard No. 61. Verification of this compliance is most important when purchasing brass and bronze components such as faucets, pressure reducing valves, etc.

*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.

# Unregulated Contaminant Monitoring (UCMR3) Completed

Lyle Godfrey, P.E., Chief-Technical Support  
Susan Corder, R.S., Environmental Specialist  
Supervisor

Monitoring for the third round of unregulated contaminant monitoring (UCMR3), required by EPA, ended in December of 2015. The Department of Health Engineering Section coordinated and paid for all the monitoring and most of the analyses for this Rule for large systems at a cost of \$267,465. It is our understanding that Arkansas was one, if not the only, state to provide such assistance to public water systems.

UCMR monitoring is conducted by EPA to determine the prevalence of contaminants in their regulatory determination process. Every five years, the Safe Drinking Water Act requires EPA to publish a list of priority unregulated contaminants, both chemical and microbial, that are known or anticipated to occur in public water systems and are known or suspected of having health concerns. This list is referred to as the contaminant candidate list or CCL. From the CCL up to 30 unregulated contaminants are selected for UCMR monitoring. As previously indicated, UCMR3 was the third round of unregulated contaminant monitoring. Each monitoring cycle lasts for three years.

UCMR3 monitoring began January 2013 and ended in December 2015. In Arkansas, 25 representative small systems, serving a retail population less than or equal to 10,000 people, and all the large systems (53) serving a retail population greater than 10,000 people were monitored. The Engineering Section collected all the samples and either transported them to the ADH laboratory or shipped them to EPA approved contract laboratories for analysis. EPA paid for the shipping and analytical cost for the small systems. For large systems the Engineering Section paid for the shipping and analytical costs under a contract with an outside laboratory for analyses that the ADH laboratory was unable to cost-effectively analyze using existing personnel and equipment.

UCMR3 consisted of monitoring for 28 different chemicals; seven volatile organic compounds, one synthetic organic compound, six metals, one oxyhalide anion, six perfluorinated compounds and seven hormones.

A total of 1067 sample sets were collected and, of which 640 were transported to the ADH laboratory for analysis and 427 were shipped to private laboratories for analysis. Each sample set included multiple analytical methods.

The Engineering Section's cost associated with UCMR3 were: ADH Laboratory analytical cost (salaries

only) - \$103,077, sample collection cost (salaries and expenses) - \$82,653, contract laboratory cost \$81,735 for an overall total expense to the Engineering Section of \$276,465. (Note the sample collection costs include expenses for sample collection and shipment to the EPA contract laboratory utilized for small systems.

Below is a listing of the analytes and the number of results above the minimum detection level. It should be noted that none of these results required resampling or approached known health action levels.

Contaminant	# of Detects
Strontium	467
Chlorate	211
Chromium-6	354
Vanadium	298
Chromium	111
Molybdenum	18
1,4-Dioxane	4
4-Androstene-3,17-dione	1
Manganese	55
Chloromethane	1
n-propylbenzene	1

Keep an eye out for the next unregulated monitoring cycle. It will be here before we know it. In fact, the proposed UCMR4 has been published.

Monitoring for UCMR4 is scheduled to begin in January 2018 and preliminary cost projections suggest it will cost the Engineering Section approximately 3.5 times as much as UCMR3.

## STAFF NEWS



Kelly Shirley, Administrative Analyst, comes to the Engineering Section from In-Home Services. Kelly has over 27 years experience working in Community Based Case Management where she was responsible for billing for the Health Department, and she later worked at the Horizon Help Desk.

# Abandoned Pesticide Program of Arkansas

Andrew Simpson,  
Agricultural Specialist, State Plant Board



Outdated and unusable pesticides are a problem for many reasons: some are illegal to use and aren't subject to conventional

disposal. As their containers age or if they're exposed to fire or flood, these chemicals can be released into the environment -- potentially contaminating our waterways and drinking water.

In 2001, Senate Bill 608 was passed to set the Abandoned Pesticide Program in motion. In an effort to protect our environment and especially our drinking water and waterways, this program gives private and commercial pesticide applicators a way to dispose of unwanted and, unusable agriculture chemicals in complete amnesty. This program is guided by the Abandoned Pesticide Advisory Board, and is implemented by the Arkansas State Plant Board. The program is influenced greatly by local University of Arkansas Extension offices and Farm Bureau offices. Funding for the program is provided by way of a fifty-dollar fee collected from every agriculture chemical registered in the state of Arkansas, so no tax payer dollars are used to fund the program.

There is no fee to participate and all information is confidential. Inventory forms will be available at County Extension and Farm Bureau offices in the weeks leading up to a collection. These forms are returned to Farm Bureau and all information in these forms is confidential and used only for planning purposes. All agricultural insecticides, herbicides, and fungicides, both known and unknown will be accepted. Of particular interest are older pesticides such as arsenicals, DDT, silvex, heptachlor, dieldrin, lindane, toxaphene, and 2,4,5-T.

Farm chemicals in all forms and sizes of containers, (e.g. drums, wooden casks, bottles, plastic containers) will be accepted. Chemicals in deteriorated or leaking packaging may need to be over packed. In some cases on-farm pickup by the hazardous waste contractor may be necessary. The pesticides are collected by a

licensed hazardous waste professional and disposed of at licensed hazardous waste incinerators.

Two pesticide collections involving around 10 counties are held each year, usually in March and October. Pesticide collections are held within the realms of a countywide cleanup. A central location is picked within the participating county, and a date and time are selected for the collection. Advertising materials such as flyers, radio spots, and newspaper articles will be used in the weeks leading up to the collection to make sure everyone knows of the upcoming event. On the day of the event a private pesticide disposal contractor will be set up on the site and will receive the unwanted pesticides.

Collections began taking place in Arkansas in 2005, and at that time only Private Applicators were able to participate in the program. It wasn't until 2013 that the program opened up to Commercial Applicators, which would include the state's vast amount of Aerial Applicators. Since 2005 the program has been able to collect just over 2.3 million pounds of abandoned pesticides, and is on track to completely cover the state with collections every 3 years.

This March, collections are being conducted in Hempstead, Howard, Lafayette, Little River, Miller, Montgomery, Nevada, Pike, Polk, Sebastian and Sevier Counties. This October collections will be held in Washington, Carroll, Madison, Benton, Boone, Newton, Marion, and Baxter Counties.

For specific dates and more information you can contact Jason Robertson or Andrew Simpson with the Arkansas State Plant Board at 501-225-1598.

## Staff News



Linda Rochelle, LPN, joined the Engineering Section as an Administrative Specialist. Linda previously worked in In-Home Services in

Case Management. She has been with the Health Department for 10 years

# Source Water Protection Wellhead Deficiency Surveys:

## Coming Soon to a Wellhead near You

**Darcia Routh, P.G. Geologist  
Supervisor**

Over the spring and summer months, source water protection staff and engineer technicians will be touring Arkansas and surveying wellheads for all community public water systems utilizing ground water supplies.

**Why?** ADH, under contracts with USGS, has been updating our 2001 original source water assessment program model (SWAP model) over the past 3 years. Once the new, improved SWAP model is fully functional, SWAP staff will begin reissuing SWAP reports, with priority given to new systems and sources brought on line since 2004. These next generation reports will weigh factors such as rainfall, soil and rock type, aquifer properties, depth of casing and grout, and regional factors. They also include risks posed by construction faults at the wellhead itself. This information was collected in the early 2000's for all wells in use at that time; it is time to take new snapshots of wellhead vulnerability for inclusion in our SWAP model.

**What we'll do:** Someone from ADH will conduct a survey of each wellhead belonging to your PWS. They will be checking for the following:  
**Locational information:** Verify and update, as necessary, the well locations using mapping-grade GPS.

**Wellhead Deficiency Survey:** Here are the data we'll be collecting for each well. Some of these questions only apply to specific pump types:

- Pump Type: vertical turbine or submersible
- Is the wellhead subject to flooding or submersion?
- Is an impervious pad present and does it extend at least 2 feet in all directions from the casing? If a pad is present, is it in good condition? How high is it above natural grade? What's the shortest distance from casing to slab edge? Is the top of casing at

least 18 inches above grade and 12 inches above the pad?

- Is the well properly vented? Properly sealed?
- Does the well discharge below grade? If so, is a pitless adapter present?
- Well construction details (requires some records review): Was the well drilled, driven, bored or hand dug? What type of casing is present?

**ADH staff** will input the information utilizing a mapping-grade Trimble GPS unit and data dictionary. The unit also allows for photographs of the wells. All of the information collected by this method is locationally enabled and downloaded directly to the ADH SWAP model GIS database. The data will be used for SWAP model inputs and for Phase I and Phase II reports issued by Wellhead Protection staff.

**What we need from you:** A member of the Source Water Protection Program staff—Stephanie Burchfield or Samantha Pike—will call to arrange an appointment for your survey. Please make yourself or a staff member available to give SWPP staff access to each of your wells (active and inactive) and to answer any questions they may have. In the meantime, if you have questions about the upcoming surveys or other aspects of Source Water Protection, you can reach us at 501-661-2623.

## Staff News



Marcia Lambert, LPN, joined the Engineering Section as an Administrative Specialist. Marcia worked in In-Home Services in Case Management and has been at the Health Department for over 12 years.

## Reduced Monitoring for Lead and Copper

Teresa Lee, P.E., Engineer Supervisor

If your water system has been at or below the action level for Lead and Copper, 0.015 mg/l and 1.3 mg/l respectively, for at least two consecutive monitoring periods, then your system is on a reduced monitoring schedule. Reduced monitoring, which runs from June 1 through September 30, occurs either annually or triennially. Approximately 250 water systems are required to collect samples each year during this monitoring period, which results in thousands of samples. Gerald Ward, the Lead and Copper Program Specialist, works with the Department of Health's laboratory to schedule sampling so that the samples are spread throughout this four month period. Bottles and instructions will ship within a few weeks to the systems required to monitor.

As the lab receives the samples, they are validated and acidified. In order for a sample to be valid, it must meet the minimum six-hour stagnation requirement. Therefore, the homeowner must return the form with the sample to certify that the water from the tap was not used for at least six hours before sampling. A sample is also invalidated if the bottle is not labeled with the proper site code, if an invalid site is used, if the bottle leaks in transit, or if the sample arrives too late to be acidified. The lab must acidify the samples within 14 days of the sample collection. Water systems must allow the lab a few days to check in the samples, therefore the samples need to be in the lab within ten days to make sure they meet this deadline.

Approximately one-third of our water systems recently received instructions for updating their lead and copper site plans. Many water systems have site plans dating from 1992 when the Lead and Copper Rule first went into effect. The Department of Health requires water systems to update site plans periodically to identify high-risk residences. If you have any questions about updating your site plan or any other issue relating to lead and copper, please contact Gerald at (501) 661-2539 or Gerald.Ward@arkansas.gov.

## Source Water Protection Wellhead Protection and Geology Update

Evelyn Kort, Geologist

The Geology staff in ADH Engineering assists public water systems with geology questions and well issues, and generates comprehensive reports which include geology, hydrology, well hydraulics and Wellhead Protection Area delineations. Geological services have been provided to the following systems since October 2014:

### Phase I Reports Wellhead Protection Area Delineations:

Dorcheat Water Association: Well #2, Well #3, Well #4

Kelso-Rohwer Water Association: Well #1, Well #2

Keiser Waterworks: Well #3

St. Charles Waterworks: Well #2

St. Francis River Regional Water District: Well #1, Well #2

Quinn Water Association, Well #1

Norphlet Waterworks: Well #2, Well #3

### Well Drill Cutting Reviews:

Melbourne Well #5

Salesville Well #3

Jonesboro Commerce Dr. Well #2

NCTR test well

Looney Tavern

### Recommendations for New Wells:

Prairie Creek Marina, Benton Co.

Rogers Park Restroom, Benton Co.

Glen Acres, Carroll Co.

Danny's Café, Hempstead Co.

Hwy. 63 Water Assoc., Jefferson Co.

NCTR, Jefferson Co.

Worth RV Park, Johnson Co.

Carlisle Waterworks, Lonoke Co.

Dell Waterworks, Mississippi Co.

Peco Foods Well #1, Well #2, Well #3, Randolph Co.

Fort Chaffee, Sebastian Co.

Cave City, Sharp Co.

Strong Waterworks, Union Co.

City of McCrory, Woodruff Co.

Please contact geologists Darcia Routh or Evelyn Kort if you have geology or aquifer questions. If you are drilling a new well we can estimate what the total depth may be and make well completion and casing recommendations.

# **Arkansas Drinking Water Advisory and Operator Licensing Committee Report**

The Arkansas Drinking Water Advisory and Operator Licensing Committee (Committee) held its quarterly meeting on January 14, 2016, in Lonoke, Arkansas. Committee members present were: Dr. Findlay Edwards, P.E., Committee Chair, University of Arkansas; Tim Shaw, Community Water System; Stacy Cheevers, Beaver Water District; Roger Moren, Sardis Water Association; Bradley Scheffler, City of Piggott; Aaron Benzing, P.E., Hawkins Weir Engineers and Jeff Stone, P.E., Executive Secretary, Arkansas Department of Health (ADH). ADH staff present were Reginald Rogers, Deputy General Counsel, Martin Nutt, Training and Certification Officer, and Ida Hampton, Administrative Specialist. Guests present were Randy Harper and Jeremy Rowe, Arkansas Environmental Training Academy (AETA); Jeff Ford, Arkansas Rural Water Association (ARWA); and Porter Rogers and Travis Russell, Kingwood Mobile Home Park. The Committee reviewed and approved the October 8, 2015 Committee meeting minutes.

## **Standing Business**

The Committee received a request for a High School Diploma/GED Certificate requirement waiver as allowed in the *Rules and Regulations Pertaining to Water Operator Licensing* from Mr. Travis Russell. Mr. Travis Russell, waiver applicant and Mr. Porter Rogers, owner, Kingwood Mobile Home Park were present to address the waiver request. Nutt stated the waiver request was for a Very Small System Distribution License. He stated the Park was experiencing difficulty retaining a long term contract operator. The Park decided to license their stable long-term maintenance person only to discover he needed to meet the education requirement or obtain a waiver from the Committee. Nutt then reviewed the waiver request's license application, the waiver application, support letters from Nan Weaver the Park's present contract operator who is resigning, and letters from the Park's co-owner, Nancy Duquette. The Committee reviewed the provided documents, clarified concerns with Nutt and asked questions of Russell and Rogers. Shaw motioned to grant a waiver for the Very Small System license, with either another waiver or proof of obtaining the GED needed to obtain any other water license, Benzing seconded the motion, and the Committee passed the motion.

## **Old Business**

Stone updated the Committee on the Engineering Section's efforts to implement the SDWA Revised Total Coliform Rule (RTCR), which becomes effective April 1, 2016. Stone indicated the Section was continuing in its efforts to educate and assist operators in the Rule's major change requiring total coliform positive samples to have an assessment of the cause, completion of the assessment forms, and perform any needed corrective actions determined by the assessment. He noted after the Rule's effective date, any violations of the RTCR would require public notice, including the failure to perform the assessments or meet the corrective actions determined by the assessments. He stated monitoring requirements were very similar to the present rule with the big change being the elimination of the requirement of a minimum of five samples in the month following of a positive sample. This change should reduce monitoring violations. He then reviewed the assessment process, what constituted RTCR violations, and answered questions.

## **New Business**

Stone reviewed the recent history of harmful algal blooms (HAB) and in particular, the Toledo, Ohio outbreak that thrust the issue into a national concern level. He noted his Ohio counterparts, post outbreak, created a Harmful Algal Blooms Response Strategy. He provided copies of the strategy to the Committee. He requested they review it and provide him with their comments and insights. He reviewed with the Committee that Arkansas has not had a HAB incidence affecting a public drinking water source but blooms had caused the Corp of Engineers to close swimming beaches on Lake Nimrod. He concluded by noting the Section has not developed a Strategy document but documents such as Ohio's, EPA Guideline documents and AWWA's response to the EPA guidelines, would help guide the Section if a response strategy is developed.

Nutt presented a reciprocity guideline for the South Carolina Drinking Water Licensing Program. He provided the Committee a specific recommendation addressing equivalency solely for South Carolina's highest-grade licenses to Arkansas's highest-grade licenses. He discussed that South Carolina's Grade A Treatment and Grade A Distribution licenses matched up well with the Arkansas Grade 4 Treatment and Grade

4 Distribution licenses except they were silent on any type of license preparation training. The Equivalency Guideline for Grade A South Carolina licenses would require the operator to document equivalent training to the Arkansas requirement and require attendance of the Arkansas Public Water System Compliance course. Scheffler motioned to accept the proposed South Carolina Equivalency Guideline as presented. Moren provided the second and the motion passed.

Nutt updated the Committee on nomination efforts for the upcoming opening on the Committee. The position to be filled is the educator position requiring an engineer on the teaching staff of any state supported institution of higher education who shall be either a sanitary engineer, civil engineer, environmental engineer, or chemical engineer with expertise in the drinking water field. He stated nomination request letters were sent to the Arkansas Water Works and Water Environment Association, the Arkansas Environmental Training Academy, the Arkansas Rural Water Association the Arkansas Water and Wastewater Managers Association, the Arkansas Society of Professional Engineers, Arkansas State University, the University of Arkansas at Fayetteville and the University of Arkansas at Little Rock. A discussion followed as to possible nominations.

### **Committee Reports**

Harper provided the Arkansas Environmental Training Academy report to the Committee. He reported AETA had partnered with Texas A & M Engineering Extension Service (TEEX) a Region VI OSHA Training Institute Education Center to become a Host Training Organization delivering OSHA-authorized health and safety courses. Rowe then provided AETA's 2016 training schedule for all five Divisions of the Academy noting the Water Division had just over 70 courses scheduled scattered throughout the State. He reported water training course participation for October through December 2015 of 12 courses, 240 contact hours with 139 students. Other Division courses reported to ADH were Environmental Health and Safety had 12 courses, 216 contact hours with 95 students, Backflow had nine courses, 144 contact hours with 80 students, and Wastewater had 12 courses, 240 contact hours with 127 students.

The Committee received a report from Stone addressing the Engineering Section's budget and PWS Supervision activity. He discussed recent efforts to map out the Section's budget/financing over the next 4 fiscal years, noting grant spending constraints, the shifting of expenses from different funding sources, and the general overall eroding of the amount of funding available. He then discussed the upcoming EPA UCMR 4 monitoring requirement cost stating EPA would pay for small system's monitoring cost. However, EPA will not pay the substantial estimated monitoring cost of \$900,000 for the State's large systems. He then reviewed core Section functions and external contracts concluding with the future need to seek additional funding in service fees to maintain all these Section functions.

Nutt started his License report by reviewing the normally provided spreadsheet detailing individual exam session performance and overall passage rate information. He noted the exams passage rates had no significant change in passage rates through the December exams noting some marginally improved rates. The Committee then discussed some specific passage rates and reasons for the rates with a focus on the ability for operators to rapidly repeat the exam and the difficulty to teach the needed knowledge to perform analysis level questions.

Nutt in his enforcement effort report provided a handout to the Committee detailing enforcement actions taken. He noted systems were reaching enforcement levels faster due to no licensed operator now being a federal rather than state violation. He concluded the report by noting the list of systems that presently do not have a licensed operator.

Ford provided the Arkansas Rural Water Association report noting Sternberg was out of state at a meeting and could not be present. He provided copies of ARWA's 2016 training calendar and provided copies of a written quarterly training report.

### **Other Business**

Rogers noting the Committee was meeting in the Dale Bumpers Training Center, requested the record of the Committee meeting recognize the death of Dale Bumpers on January 1, 2016. He reviewed Bumper's service as Arkansas Governor from 1971 to 1975 and US Senator from 1975 to 1999. He concluded by expressing condolences in the name of the Committee to Bumper's family and friends.

The Committee confirmed next meeting date for January 14, 2016 and adjourned the meeting.

# Water Operator Licenses Issued

December 1, 2015 through February 29, 2016

NAME	LICENSE	WATER SYSTEM NAME
BRANTLEY KENNETH	D - II & T - II	INDIAN SWITCH RURAL WATER ASSN
BROWN DOUGLAS	D - II	BULL SHOALS WATER SYSTEM
DAGESTAD SEAN	D - IV	ROGERS WATER UTILITIES
HAM JOHN	D - I	PARKERS CHAPEL PUBLIC WATER
HUBBARD JAKE	D - III	CLINTON WATERWORKS
JOHNSON JIMMIE	D - IV	FORT SMITH WATER UTILITIES
JOHNSON KENDALL	D - II	DEQUEEN WATER WORK
KELLEY JIM	D - II	LONOKE WATERWORKS
LITTLETON VICTOR	T - IV	GREENWOOD WATERWORKS
MILLER CHARLES	D - VSS	TOLLETTE WATER
OTT DARRELL	T - III	COMMUNITY WATER SYSTEM
PARKER JEFFREY	D - II & T - II	GEORGIA PACIFIC WOOD PRODUCTS LLC
PAYNE DAN	D - IV	CLINTON WATERWORKS
PLOTZ CHRISTOPHER	D - III	BATESVILLE WATER UTILITIES
REED CORY	D - III	GENTRY WATERWORKS
ROBINSON MICHAEL	D - VSS	TOLLETTE WATER COTTONSHED WATERWORKS
SHORT JACOB	D - IV & T - IV	JACKSONVILLE WATERWORKS
SMITH SETH	D - VSS	GILLHAM WATERWORKS
SMITHSON SCOTT	D - I	LAVACA WATERWORKS
SPENCER SHANE	D - II	LONOKE WATERWORKS
STUBBS CHET	D - II	DEQUEEN WATER WORK
TRAVIS PATRICIA	D - II	WARD WATERWORKS
WARD CALVIN	D - IV	DOTA PUBLIC WATER AUTHORITY
YOUNG ERIC	D - I	EUREKA SPRINGS WATERWORKS
YOUNG STEPHEN	D - I	PARKERS CHAPEL PUBLIC WATER

## Arkansas Water Works & Water Environment Association

### Annual Conference and Short School

May 1 - 4, 2016 - Hot Springs Convention Center - Hot Springs, Arkansas

[www.awwwea.org](http://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 is expected to consist of two (2) full days of training with six sessions each day providing 12 concurrent training topics per session. Typically, no training topic is repeated. The exhibit hall Sunday afternoon through Tuesday morning will have water industry related companies displaying their products.

The Conference will track 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 through Arkansas Environmental Training Academy will offer the AETA Basic Water Math course on Monday and the AETA Applied Water Math course on Tuesday. The ADH Public Water System Compliance course will also be offered on Tuesday. You must register for the conference through AWWWEA and the training provider to attend the courses. All mandatory courses start at 8:00 a.m. and end at 5:00 p.m., with an opportunity to enjoy the conference lunch buffet. Attendance of the entire course is required to receive a course completion certificate. License Exams will be held Wednesday at 9:00 am at the convention center.

## Mandatory Training Course Schedule

Most Current Listing is at: [www.healthy.arkansas.gov/eng/autoupdates/oper/mandtrngall.htm](http://www.healthy.arkansas.gov/eng/autoupdates/oper/mandtrngall.htm).

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

### WATER LICENSE EXAM SESSION NOT HELD END OF MOST COURSES.

(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	4/5/2016	04/05/16	8:00 AM	Jonesboro	Operations Facility, 105 W Johnson Ave	AETA
Applied Water Math	4/6/2016	04/06/16	8:00 AM	Jonesboro	Operations Facility, 105 W Johnson Ave	AETA
ADH PWS Compliance	4/7/2016	04/07/16	8:00 AM	Jonesboro	Operations Facility, 105 W Johnson Ave	ADH
Applied Water Math	4/11/2016	04/25/16	TBD	Internet	<a href="http://www.sautech.edu/aeta/schedule.aspx">http://www.sautech.edu/aeta/schedule.aspx</a>	AETA
Intermediate Water Treatment	4/12/2016	04/14/16	8:00 AM	Springdale	Springdale Water Training Facility, 525 Oak Ave	AETA
Basic Water Math	4/12/2016	04/12/16	8:00 AM	Arkadelphia	Recreation Center, 2555 Twin Rivers Drive	ARWA
ADH PWS Compliance	4/13/2016	04/13/16	8:00 AM	Arkadelphia	Recreation Center, 2555 Twin Rivers Dr.	ADH
Applied Water Math	4/14/2016	04/14/16	8:00 AM	Arkadelphia	Recreation Center, 2555 Twin Rivers Drive	ARWA
Intermediate Water Distribution	4/19/2016	04/21/16	8:00 AM	Clarksville	CLW (Operations Bld) 710 East Main (Hwy 64 East)	ARWA
Intermediate Water Distribution	4/25/2016	04/27/16	8:00 AM	Jonesboro	Operations Facility, 105 W Johnson Ave	AETA
Basic Water Math	5/2/2016	05/02/16	8:00 AM	Hot Springs	AWW&WEA Conf, HS Convention Center	AETA
Basic Water Treatment	5/2/2016	05/16/16	TBD	Internet	<a href="http://www.sautech.edu/aeta/schedule.aspx">http://www.sautech.edu/aeta/schedule.aspx</a>	AETA
Applied Water Math	5/3/2016	05/03/16	8:00 AM	Hot Springs	AWW&WEA Conf, HS Convention Center	AETA
ADH PWS Compliance	5/3/2016	05/03/16	8:00 AM	Hot Springs	AWW&WEA Conf, HS Convention Center	ADH
Basic Water Distribution (Night	5/9/2016	05/25/16	TBA	Fort Smith	Fort Smith Utilities, 3900 Kelly Hwy	AETA
Intermediate Water Treatment	5/10/2016	05/12/16	8:00 AM	Blytheville	Blytheville Waterworks, 1301 June Gosnell Dr	AETA
Advanced Water Distribution	5/10/2016	05/12/16	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Basic Water Distribution	5/16/2016	05/30/16	TBD	Internet	<a href="http://www.sautech.edu/aeta/schedule.aspx">http://www.sautech.edu/aeta/schedule.aspx</a>	AETA
Advanced Water Treatment	5/17/2016	05/19/16	8:00 AM	Little Rock	TBA (Contact AETA)	AETA
Intermediate Water Distribution	5/24/2016	05/26/16	8:00 AM	Camden	AR Env Training Academy, 4615 Spellman Road	AETA
Advanced Water Treatment	5/24/2016	05/26/16	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Intermediate Water Treatment	5/30/2016	06/13/16	TBD	Internet	<a href="http://www.sautech.edu/aeta/schedule.aspx">http://www.sautech.edu/aeta/schedule.aspx</a>	AETA
Intermediate Water Distribution	5/31/2016	06/02/16	8:00 AM	Fayetteville	Utilities Operations Center, 2435 S Industrial Dr	AETA
Intermediate Water Treatment	6/7/2016	06/09/16	8:00 AM	Camden	AR Env Training Academy, 4615 Spellman Road	AETA
Intermediate Water Distribution	6/13/2016	06/27/16	TBD	Internet	<a href="http://www.sautech.edu/aeta/schedule.aspx">http://www.sautech.edu/aeta/schedule.aspx</a>	AETA
Advanced Water Distribution	6/20/2016	06/22/16	8:00 AM	Jonesboro	Operations Facility, 105 W Johnson Ave	AETA
Basic Water Math	6/21/2016	06/21/16	8:00 AM	Camden	AR Env Training Academy, 4615 Spellman Road	AETA
Applied Water Math	6/22/2016	06/22/16	8:00 AM	Camden	AR Env Training Academy, 4615 Spellman Road	AETA
ADH PWS Compliance	6/23/2016	06/23/16	8:00 AM	Camden	AR Env Training Academy, 4615 Spellman Road	ADH
Advanced Water Treatment	6/27/2016	07/11/16	TBD	Internet	<a href="http://www.sautech.edu/aeta/schedule.aspx">http://www.sautech.edu/aeta/schedule.aspx</a>	AETA
Basic Water Distribution	6/28/2016	06/30/16	8:00 AM	Springdale	Springdale Water Training Facility, 525 Oak Ave	ARWA
Basic Water Treatment	6/28/2016	06/30/16	8:00 AM	Greers Ferry	Community Water System, 299 Lakeshore Drive	AETA
Basic Water Distribution	7/5/2016	07/07/16	8:00 AM	Russellville	Tri-County Water, 5306 N Arkansas Ave	AETA
Advanced Water Distribution	7/11/2016	07/25/16	TBD	Internet	<a href="http://www.sautech.edu/aeta/schedule.aspx">http://www.sautech.edu/aeta/schedule.aspx</a>	AETA
ADH PWS Compliance	7/12/2016	07/12/16	8:00 AM	Greers Ferry	Community Water System, 299 Lakeshore Drive	ADH
Basic Water Distribution	7/12/2016	07/14/16	8:00 AM	Mtn. Home	Charles R Newton Emer Serv Trng Center, Midway	ARWA
Basic Water Math	7/13/2016	07/13/16	8:00 AM	Greers Ferry	Community Water System, 299 Lakeshore Drive	AETA
Applied Water Math	7/14/2016	07/14/16	8:00 AM	Greers Ferry	Community Water System, 299 Lakeshore Drive	AETA
Intermediate Water Treatment	7/19/2016	07/21/16	8:00 AM	Greers Ferry	Community Water System, 299 Lakeshore Drive	AETA
Intermediate Water Distribution	7/26/2016	07/28/16	8:00 AM	N Little Rock	CAW Maryland Complex, 1500 W Maryland Ave	AETA
Intermediate Water Distribution	7/26/2016	07/28/16	8:00 AM	Springdale	Springdale Water Training Facility, 525 Oak Ave	ARWA
Basic Water Math	8/1/2016	08/15/16	TBD	Internet	<a href="http://www.sautech.edu/aeta/schedule.aspx">http://www.sautech.edu/aeta/schedule.aspx</a>	AETA
Basic Water Math	8/2/2016	08/02/16	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
ADH PWS Compliance	8/3/2016	08/03/16	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ADH
Applied Water Math	8/4/2016	08/04/16	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Applied Water Math	8/15/2016	08/29/16	TBD	Internet	<a href="http://www.sautech.edu/aeta/schedule.aspx">http://www.sautech.edu/aeta/schedule.aspx</a>	AETA
Advanced Water Distribution	8/16/2016	08/18/16	8:00 AM	N Little Rock	CAW Maryland Complex, 1500 W Maryland Ave	AETA
Basic Water Math	8/23/2016	08/23/16	8:00 AM	Springdale	Springdale Water Training Facility, 525 Oak Ave	AETA
Intermediate Water Distribution	8/23/2016	08/25/16	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Applied Water Math	8/24/2016	08/24/16	8:00 AM	Springdale	Springdale Water Training Facility, 525 Oak Ave	AETA

ADH PWS Compliance	8/25/2016	08/25/16	8:00 AM	Springdale	Springdale Water Training Facility, 525 Oak Ave	ADH
Basic Water Treatment	8/29/2016	09/12/16	TBD	Internet	<a href="http://www.sautech.edu/aeta/schedule.aspx">http://www.sautech.edu/aeta/schedule.aspx</a>	AETA
Intermediate Water Treatment	8/30/2016	09/01/16	8:00 AM	Lowell	Beaver Water Dist, 301 N Primrose Rd	AETA
Basic Water Math	9/6/2016	09/06/16	8:00 AM	Russellville	Tri-County Water, 5306 N Arkansas Ave	AETA
Applied Water Math	9/7/2016	09/07/16	8:00 AM	Russellville	Tri-County Water, 5306 N Arkansas Ave	AETA
ADH PWS Compliance	9/8/2016	09/08/16	8:00 AM	Russellville	Tri-County Water, 5306 N Arkansas Ave	ADH
Basic Water Distribution	9/12/2016	09/26/16	TBD	Internet	<a href="http://www.sautech.edu/aeta/schedule.aspx">http://www.sautech.edu/aeta/schedule.aspx</a>	AETA
Basic Water Treatment	9/20/2016	09/22/16	8:00 AM	Camden	AR Env Training Academy, 4615 Spellman Road	AETA
Basic Water Distribution	9/27/2016	09/29/16	8:00 AM	Rogers	TBA (Contact AETA)	AETA
Intermediate Water Treatment	10/3/2016	10/17/16	TBD	Internet	<a href="http://www.sautech.edu/aeta/schedule.aspx">http://www.sautech.edu/aeta/schedule.aspx</a>	AETA
Basic Water Math	10/4/2016	10/04/16	8:00 AM	Fayetteville	Utilities Operations Center, 2435 S Industrial Dr	AETA
Applied Water Math	10/5/2016	10/05/16	8:00 AM	Fayetteville	Utilities Operations Center, 2435 S Industrial Dr	AETA
ADH PWS Compliance	10/6/2016	10/06/16	8:00 AM	Fayetteville	Utilities Operations Center, 2435 S Industrial Dr	ADH
Basic Water Math (Afternoon Class)	10/10/2016	10/13/16	8:00 AM	Little Rock	TBA (Contact AETA)	AETA
Advanced Water Distribution	10/11/2016	10/13/16	8:00 AM	Springdale	Springdale Water Training Facility, 525 Oak Ave	ARWA
Intermediate Water Distribution	10/17/2016	10/31/16	TBD	Internet	<a href="http://www.sautech.edu/aeta/schedule.aspx">http://www.sautech.edu/aeta/schedule.aspx</a>	AETA
Intermediate Water Distribution	10/18/2016	10/20/16	8:00 AM	Hot Springs	HS Transportation Depot, 100 Broadway Terrace	AETA
Basic Water Treatment	10/25/2016	10/27/16	8:00 AM	N Little Rock	CAW Maryland Complex, 1500 W Maryland Ave	AETA
Advanced Water Treatment	10/31/2016	11/14/15	TBD	Internet	<a href="http://www.sautech.edu/aeta/schedule.aspx">http://www.sautech.edu/aeta/schedule.aspx</a>	AETA
Basic Water Math	11/1/2016	11/01/16	8:00 AM	Hot Springs	HS Transportation Depot, 100 Broadway Terrace	AETA
Applied Water Math	11/2/2016	11/02/16	8:00 AM	Hot Springs	HS Transportation Depot, 100 Broadway Terrace	AETA
ADH PWS Compliance	11/3/2016	11/03/16	8:00 AM	Hot Springs	HS Transportation Depot, 100 Broadway Terrace	ADH
Basic Water Math	11/8/2016	11/08/16	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Intermediate Water Treatment	11/8/2016	11/10/16	8:00 AM	Russellville	Tri-County Water, 5306 N Arkansas Ave	AETA
ADH PWS Compliance	11/9/2016	11/09/16	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ADH
Applied Water Math	11/10/2016	11/10/16	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Advanced Water Distribution	11/14/2016	11/28/16	TBD	Internet	<a href="http://www.sautech.edu/aeta/schedule.aspx">http://www.sautech.edu/aeta/schedule.aspx</a>	AETA
Advanced Water Distribution	11/15/2016	11/17/16	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Advanced Water Treatment	11/15/2016	11/17/16	8:00 AM	Little Rock	TBA (Contact AETA)	AETA
Intermediate Water Distribution	11/29/2016	12/01/16	8:00 AM	Fayetteville	Utilities Operations Center, 2435 S Industrial Dr	AETA
Basic Water Math	12/5/2016	12/19/16	TBD	Internet	<a href="http://www.sautech.edu/aeta/schedule.aspx">http://www.sautech.edu/aeta/schedule.aspx</a>	AETA
Applied Water Math	12/5/2016	12/19/16	TBD	Internet	<a href="http://www.sautech.edu/aeta/schedule.aspx">http://www.sautech.edu/aeta/schedule.aspx</a>	AETA
Basic Water Math	12/6/2016	12/06/16	8:00 AM	Jonesboro	Operations Facility, 105 W Johnson Ave	AETA
Advanced Water Treatment	12/6/2016	12/08/16	8:00 AM	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Applied Water Math	12/7/2016	12/07/16	8:00 AM	Jonesboro	Operations Facility, 105 W Johnson Ave	AETA
ADH PWS Compliance	12/8/2016	12/08/16	8:00 AM	Jonesboro	Operations Facility, 105 W Johnson Ave	ADH

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

## Arkansas Rural Water Association Annual Technical Conference & Exhibition

September 18 - 21, 2016 – Hot Springs Convention Center – Hot Springs, Arkansas

[www.arkansasruralwater.org](http://www.arkansasruralwater.org)

The conference consists of two (2) full days of training. Each day has four (4) training sessions with multiple concurrent training topics offered each session. An exhibit hall with a wide selection of water industry related companies displaying their latest and best products is available. The conference is approved for up to 16 contact hours of directly applicable water license training credit. The Conference will track 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.

No mandatory water training courses for exam purposes are offered during this conference. License Exams are held Wednesday at 9:00 am in the convention center.

## WATER OPERATOR LICENSE EXAMINATIONS SCHEDULE

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

**You must register for the exam 45 days in advance.** To register on the internet go to [www.healthy.arkansas.gov/eng](http://www.healthy.arkansas.gov/eng) and click on Operator Certification, then select Register- Water License Exam. To register by e-mail provide name, license exam desired, exam session site, and exam date in an email addressed to [ADH.Water.Licensing@arkansas.gov](mailto:ADH.Water.Licensing@arkansas.gov). You may register by phone with the Water Licensing Program at (501) 661-2623. Call (501) 661-2623, ask for Water Licensing Program.

Listed below are the dates and locations of examination sessions as scheduled, as of **March 1, 2016**. 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, pagers and other electronic communication devices are not allowed. Non-Programmable calculators are allowed in exam sessions.

EXAM DATE	REGISTER DEADLINE	CITY	LOCATION	TIME
6/3/2016	4/19/2016	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	9:00 AM
6/3/2016	4/19/2016	Fayetteville	Fayetteville Operations Center, 2435 S Industrial Dr	9:00 AM
6/3/2016	4/19/2016	Nashville	Carter Day Center, 200 Nichols Drive	9:00 AM
6/10/2016	4/26/2016	Clarksville	CLW (Operations Bld) 710 East Main (Hwy 64 East)	9:00 AM
6/10/2016	4/26/2016	Jonesboro	Jonesboro CWL Office Training Rm, 400 E Monroe	9:00 AM
6/10/2016	4/26/2016	Camden	AR Environmental Training Academy, 100 Carr Road	9:00 AM
9/2/2016	7/19/2016	Fayetteville	Fayetteville Operations Center, 2435 S Industrial Dr	9:00 AM
9/2/2016	7/19/2016	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	9:00 AM
9/2/2016	7/19/2016	Mtn. Home	Baxter Co OEM Training Facility, 170 Dillard Dr,	9:00 AM
9/9/2016	7/26/2016	Clarksville	CLW (Operations Bld) 710 East Main (Hwy 64 East)	9:00 AM
9/9/2016	7/26/2016	Jonesboro	Jonesboro CWL Office Training Rm, 400 E Monroe	9:00 AM
9/9/2016	7/26/2016	Camden	AR Environmental Training Academy, 100 Carr Road	9:00 AM
9/21/2016	8/8/2016	Hot Springs	ARWA Conference, HS Convention Center	9:00 AM
12/2/2016	10/18/2016	Fayetteville	Fayetteville Operations Center, 2435 S Industrial Dr	9:00 AM
12/2/2016	10/18/2016	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	9:00 AM
12/2/2016	10/18/2016	Nashville	Carter Day Center, 200 Nichols Drive	9:00 AM
12/9/2016	10/25/2016	Camden	AR Environmental Training Academy, 100 Carr Road	9:00 AM
12/9/2016	10/25/2016	Clarksville	CLW (Operations Bld) 710 East Main (Hwy 64 East)	9:00 AM
12/9/2016	10/25/2016	Jonesboro	Jonesboro CWL Office Training Rm, 400 E Monroe	9:00 AM

The above exam session information is subject to change. You should confirm this information just prior to the scheduled examination period. Also, the latest and complete exam schedule information can be viewed on the Internet at: < <http://www.healthy.arkansas.gov/eng/autoupdates/oper/operexam.htm> >.

**Remember, you must register for the exam 45 days in advance. Application for License is not registration for an exam.**

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 manuals/materials. Credit for the mandatory Certification Training Courses must be obtained before taking an exam. Copies of your training documentation must be provided when registering for an exam or provide documentation of its attendance by the exam session.

# Major Monitoring, MCL, Treatment Technique, & Licensing Violations

Community & Nontransient Noncommunity Public Water Systems, Oct - December, 2015

ADC CUMMINS UNIT MAINT	CCR 10	HARMONY GROVE WATER	DBPR 10,11, 12
ADC TUCKER UNIT MAINT	BMCL 10	HARTFORD WATERWORKS	Bmon 10, 12
ADC TUCKER UNIT MAINT	Dmon 10	HARTMAN WATERWORKS	Bmon 11
ASP QUEEN WILHELMENA	DBPR 10,11, 12	HATFIELD WATERWORKS	TMCL 12
AURELLE WATER SYSTEM	Dmon 11, 12	HAVANA WATERWORKS	DBPR 10,11, 12
BARLING WATERWORKS	Bmon 11	HICKORY RIDGE	Dmon 12
BEN LOMOND WATERWORKS	PN 12	HIGHFILL WATER	DBPR 10,11, 12
BEN LOMOND WATERWORKS	Bmon 12	HOPE WATER LIGHT COMM	DBPR 10,11, 12
BEN LOMOND WATERWORKS	OperLic 10, 11	HORATIO WATERWORKS	OperLic 11, 12
BEN LOMOND WATERWORKS	BMCL 11	HORATIO WATERWORKS	GWRmon 12
BENTON-WASHINGTON REG	DBPR 10,11, 12	HORATIO WATERWORKS	Bmon 12
BIGGERS BLUFF	PN 10	HORATIO WATERWORKS	Dmon 11
BIGGERS WATERWORKS	BMCL 11	HOSANNA HEIGHTS WATER	BMCL 11
BODCAW RURAL WATER	DBPR 10,11, 12	HUGHES WATERWORKS	PN 11
BRECKENRIDGE UNION	CCR 10	HUMPHREY WATERWORKS	Bmon 11
BRUNO PYATT SCHOOL	OperLic 12	HUNTINGTON WATERWORKS	OperLic 11, 12
BURDETTE WATERWORKS	BMCL 11	HWY 4 24 WATER ASSN	DBPR 10,11, 12
CASA WATER DEPARTMENT	DBPR 10,11, 12	HWY 64 WATER ASSN	Bmon 11
CENTRAL PUBLIC WATER	Bmon 11	JAMES FORK REGIONAL WD	DBPR 10,11, 12
CHARLESTON WATERWORKS	Bmon 10	JOHNSON TWP WATER ASSN	Bmon 12
CHICOT JUNCTION WATER	DBPR 10,11, 12	KIBLER WATER SYSTEM	DBPR 10,11, 12
COTTON PLANT	PN 11	LACEY-LADELLE WATER ASSN	BMCL 11
COTTONSHED WATERWORKS	OperLic10,11,12	LAKESHORE ESTATES WATER	Bmon 11
DEER RUN WATER COMPANY	OperLic10,11,12	LEE COUNTY WATER ASSN	DBPR 10,11, 12
DEER RUN WATER COMPANY	PN 10, 11, 12	LEOLA WATERWORKS	Bmon 10
DELL WATERWORKS	Bmon 11	LITTLE RIVER COUNTY RDA	DBPR 10,11, 12
EAST LOGAN CO RURAL	DBPR 10,11, 12	MAYNARD WATERWORKS	Bmon 12
ELAINE WATERWORKS	CCR 10	MILLTOWN-WASHBURN	DBPR 10,11, 12
ELAINE WATERWORKS	GWRmon 10	MONTGOMERY CO REGIONAL	DBPR 10,11, 12
FLIPPIN WATERWORKS	Bmon 11	MONTICELLO WATER	Bmon 12
FOUKE WATERWORKS	OperLic10,11,12	MONTROSE WATERWORKS	DBPR 10,11, 12
FOUKE WATERWORKS	PN 12	MOUNT HOLLY WATERWORKS	Bmon 11
FREE HOPE WATER ASSN	Bmon 11	MOUNT OLIVE WATER ASSN	Bmon 11
FRENCHPORT WATER ASSN	Bmon 11	MULBERRY WATERWORKS	Bmon 10
GARFIELD WATERWORKS	BMCL 12	N GARLAND CO REG WATER	BMCL 12
GENTRY WATERWORKS	DBPR 10,11, 12	NASHVILLE RURAL WATER	DBPR 10,11, 12
GILLHAM REGIONAL WATER	Tmon 10, 11, 12	NASHVILLE RURAL WATER	PN 12
GILLHAM REGIONAL WATER	SWTR 10,11, 12	NORTH LAGRUE WATER ASSN	BMCL 11
GILLHAM REGIONAL WATER	TMCL 12	NORTHEAST DEWITT WATER	BMCL 11
GILLHAM WATERWORKS	OperLic 10	OLA WATERWORKS	DBPR 10,11, 12
GILMORE WATERWORKS	PN 10	OLD UNION WATER ASSN	Bmon 10
GREENWAY WATERWORKS	BMCL 11, 12	OZAN CREEK WATER SYSTEM	DBPR 10,11, 12
GREENWAY WATERWORKS	OperLic 10	OZAN WATERWORKS	Dmon 10
GREENWAY WATERWORKS	GWRmon 12	PARON-OWENSVILLE WA	DBPR 10,11, 12
HACKETT WATERWORKS	Bmon 10, 11	PARON-OWENSVILLE WA	PN 12
HAMBURG WATERWORKS	Bmon 10	PENDLETON-PEA RIDGE	Bmon 10

PERRY WATER SYSTEM	Bmon 11
PICKENS WATERWORKS	Dmon 11
PIGGOTT WATERWORKS	BMCL 12
PRATTSVILLE WATERWORKS	CCR 10
PYATT WATERWORKS	Bmon 12
QUINN WATER ASSN	Dmon 12
RVAF TEXARKANA	Bmon 12
RVAF TEXARKANA	GWRmon 12
RIVIERA UTILITIES	DBPR 10,11, 12
SOUTH PIKE CO WATER	DBPR 10,11, 12
SOUTHWEST ARKANSAS WS	DBPR 10,11, 12
SPARKMAN WATERWORKS	OperLic 10
STRONG WATERWORKS	Dmon 11, 12
TEXARKANA WATER UTILITIES	DPBR 10,11, 12
TRINITY BEHAVIORAL HEALTH	BMCL 10
VANDERVOORT	Bmon 12
WASHINGTON WATER AUTHORITY	DBPR 10, 11, 12, PN 12
WIEDERKEHR VILLAGE	PN 11, 12
WIEDERKEHR VILLAGE	TMCL 10,11, 12
WIEDERKEHR VILLAGE	OperLic 10, 11
WILMOT WATERWORKS	DBPR 10,11, 12
WILTON WATERWORKS	PN 10
WINTHROP WATER ASSOC	Bmon 12

**KEY:** Bmon = Bacti Monitoring; BMCL = Bacti MCL; CCR = Consumer Confidence Rule; Dmon = Disinfection By Product Rule Monitoring; DBPR=Disinfection By Product Rule MCL or Treatment Technique; GWRMCL=GWR Treatment Technique; GWRmon= GWR Monitoring or Reporting; PN = Public Notice Rule 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 = October 2015,, 11 = November 2015, 12 = December 2015

## Arkansas Water & Wastewater Managers Association Annual Meeting

July 20 - 23, 2016 – Chancellor Hotel – Fayetteville,  
AR

[www.arkwwma.org](http://www.arkwwma.org)

The conference consists of three (3) days of manager focused training. Each day has a morning training session. The conference is approved for up to 10 contact hours of directly applicable water license training credit. No mandatory water training courses for exam purposes or license exams are available.

### More Staff News



Samantha Pike, Environmental Health Specialist, will be working in the Source Water Assessment and Protection Program. Samantha recently earned a Master of Science degree in Biology from the University of Central Arkansas.



Joseph Aaron Brown joined the Engineering Section as an Engineer Technician. Joseph will be working in the sample collection program and will primarily work in eastern Arkansas. Joseph previously worked for LM Wind Power as an Engineer Technician.



Charles Matthew Mize joined the Engineering Section as an Engineer Technician. Charles will be working in the sample collection program and will primarily work in north east Arkansas. Charles was self-employed as an owner/operator of a landscaping business.

Return Service Requested

PRINTED ON RECYCLED PAPER

AWW&WEA District Meetings  
 See also the Division's web site [www.healthylarkansas.com/eng/](http://www.healthylarkansas.com/eng/) for updates.

DATE	TIME	CITY	LOCATION	SPONSOR
<u>May 2016</u>				
		No Meeting Scheduled		Western District, AWW&WEA
		No Meeting Scheduled		Northwest District, AWW&WEA
5	5:00 PM	TBA	TBA	Central District, AWW&WEA
12	5:00 PM	Russellville	Western Sizzlin	AR Valley District, AWW&WEA
12	5:00 PM	Pleasant Plains	Tadpole's Catfish Barn	North Central District, AWW&WEA
12	5:30 PM	Stuttgart	Art Center	Eastern District, AWW&WEA
17	5:00 PM	Watson Chapel	Water Shop	Southeast District, AWW&WEA
19	12:30 PM	Walnut Ridge	Wonderful Chinese Buffet	Northeast District, AWW&WEA
26	6:00 PM	Arkadelphia	Western Sizzlin	Southwest District, AWW&WEA
<u>June 2016</u>				
2	5:00 PM	TBA	TBA	Central District, AWW&WEA
2	5:30 PM	Fort Smith	Columbus Acres Picnic	Western District, AWW&WEA
8	8:30 AM	Green Forrest	Alumni Center	Northwest District, AWW&WEA
9	5:30 PM	Caldwell	Catfish Island	Eastern Central 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
16	12:30 PM	Pocahontas	Beverly's	Northeast District, AWW&WEA
21	5:00 PM	Monticello	Western Sizzlin	Southeast District, AWW&WEA
23	6:00 PM	Foreman	Community Center	Southwest District, AWW&WEA
<u>July 2016</u>				
7	5:00 PM	TBA	TBA	Central District, AWW&WEA
13	8:30 AM	Pea Ridge	Emergency Services Bldg	Northwest District, AWW&WEA
14	5:00 PM	Pleasant Plains	Tadpole's Catfish Barn	North Central District, AWW&WEA
14	5:30 PM	Fort Smith	Golden Corral	Western District, AWW&WEA
14	5:30 AM	Russellville	Western Sizzlin	AR Valley District, AWW&WEA
14	5:30 PM	Marvell	Training Academy	Eastern District, AWW&WEA
19	5:00 PM	Star City	Country Village BBQ	Southeast District, AWW&WEA
21	12:30 PM	Piggot	Country Club	Northeast District, AWW&WEA
28	6:00 PM	El Dorado	Water Utility Room	Southwest District, AWW&WEA