



# ARKANSAS DRINKING WATER UPDATE

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ENGINEERING SECTION – DEPARTMENT OF HEALTH

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## USGS ISSUES NEWS RELEASE CONCERNING RADIUM CONTAMINATION



On February 15, 2012, the U.S. Geological Survey issued a press release discussing the results of a study they conducted concerning naturally occurring radium contamination in aquifers utilized for drinking water. The nationwide study found that groundwater in aquifers on the East Coast and in the Central U.S. have the highest risk from this naturally occurring radioactive element and known carcinogen.

During the study, a total of 1270 raw water samples were collected from 15 aquifer systems used for drinking water in 45 different states. The sample collection included 202 wells utilized for public water system supply, 621 domestic wells, and 443 shallow observation wells. The samples were analyzed for Radium<sup>224</sup>, Radium<sup>226</sup>, and Radium<sup>228</sup>. The U.S. Environmental Protection Agency has established a maximum contaminant level (MCL) for Radium<sup>226</sup> and Radium<sup>228</sup> combined of 5 pCi/L. Exceedances of the MCL were found in 7 of the 15 aquifer systems. One of those aquifer systems found to have radium exceedances, the Ozark Plateau Cambro-Ordovician dolomites and sandstones, is partially located in northern Arkansas. (Graphic, above, of Ozark Plateau Aquifer).

Radium is usually present in low concentrations in most soil, water and rocks. This study found that

harmful levels of dissolved radium in groundwater is more likely when the groundwater has either low oxygen content, low pH, or both.

Three public water systems located in north central Arkansas have incurred MCL violations for radium contamination. Fortunately, these compliance issues will be resolved when these water systems connect to the soon to be completed Ozark Mountain Regional Public Water Authority. However, individual home owners that utilize private wells in this area may be at risk. The USGS study can be found at: <http://water.usgs.gov/nawqa/trace/radium/index.html>

## Lyle Godfrey Assumes New Role

Lyle Godfrey, a long term employee of the Engineering Section, has assumed the role of Chief/Technical Support. The Chief/Technical Support position was previously occupied by Lance Jones and this position had been vacant following Lance Jones' transfer to the Chief Engineer position. As Chief/Technical Support, Lyle now oversees a variety of Engineering Section functions that include: water system compliance monitoring sample collection; watershed and source water protection efforts; SRF set aside administration; technical assistance for disinfection byproducts rule, for surface water treatment rule, for lead and copper rule and for ground water rule; transient public water system compliance; and consumer confidence report preparation.

Lyle is licensed as a Professional Engineer in the state of Arkansas and has a Bachelor's degree in Civil Engineering. Lyle began employment at the Arkansas Department of Health in 1978 and has previously served in the positions of District Engineer, Engineer Supervisor over northwest and north central Arkansas, and as Engineer Supervisor over disinfection byproducts rule and surface water treatment rule technical assistance, as well as source water protection efforts. Lyle can be contacted at : [lyle.godfrey@arkansas.gov](mailto:lyle.godfrey@arkansas.gov)

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# Special Precautions Required For Contact Lens or Neti Pot Use

Jeff Stone, P.E.

Public water supplies are **disinfected** for the purpose of providing communities with public **drinking** water supplies. Public water supplies are **not sterilized** for other uses that may require the use of purified water. As public health officials and as water system managers and operators, we may occasionally be thrust into the role of having to educate the community regarding the differences between disinfected water and sterilized water. "Safe drinking water" means safe to drink—not necessarily safe to use for other purposes that might have greater personal health risks associated with them. A couple of examples of activities that may require the use of sterilized water or specially prepared solutions include contact lens maintenance and sinus irrigation. Recent events reflect an apparent lack of awareness among the general population concerning the distinction between disinfection and sterilization. For instance, two relatively routine activities necessitate use of sterilized water rather than merely disinfected water.

**CONTACT LENSES:** Contact lens care requires the use of sterile conditioning and disinfecting solutions and most contact lens users are aware of this requirement. The eye care profession is good at educating contact lens users of the need for proper contact lens care and disinfection practices. Nevertheless, eye infections resulting from the use either of non-sterilized or of improperly prepared homemade solutions continue to occur. An eye infection—one that can be contracted via use of non-sterilized water for contact lens maintenance—is called *Acanthamoeba keratitis*. This infection is caused by the organism *Acanthamoeba* and the resulting infection is nearly always associated with contact lens use. Swimming while wearing contact lenses can also increase the risk of contracting this disease. The U.S. Environmental Protection Agency maintains a web page to help educate the public concerning contact lens use and *Acanthamoeba keratitis*. This web page can be found at: <http://water.epa.gov/action/advisories/acanthamoeb>



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[a/index.cfm](http://www.cdc.gov/parasites/acanthamoeba/prevention.html) The Centers for Disease Control also provides information concerning *Acanthamoeba keratitis* at: <http://www.cdc.gov/parasites/acanthamoeba/prevention.html>

**SINUS IRRIGATION:** Some individuals in the community practice daily sinus irrigation in an effort to improve health and minimize sinus infections. The Neti pot is a specially shaped container sold for this purpose.

However, not everyone understands that this practice requires the use of specially prepared solutions. Sinus irrigation should never be done using untreated tap water; rather, follow manufacturers' orders and use only lukewarm distilled,

filtered, or boiled water. As an alternative, pre-prepared solutions can be purchased in groceries, in pharmacies, or at discount stores. Some common names for these products include "Saline Nasal Spray", "Saline Nasal Rinse" or similar product names. Improper use of other water sources put one at risk of diseases that can be contracted via the nasal and sinus cavities. One example is the fatal infection associated with the organism *Naegleria fowleri*. This very rare, but nearly always fatal, infection can occur when this organism is introduced into the sinus cavities via a variety of activities that include swimming in warm water lakes or streams or via sinus irrigation if non-appropriate sources of rinse water are used. In two separate cases in Louisiana during 2011, the victims of this disease were apparently using "Neti pots" to irrigate their sinuses with water obtained from their home plumbing system. In these two recent cases in Louisiana, the home plumbing systems were apparently harboring *Naegleria fowleri* organisms and the two individuals contracted this fatal disease. The Centers for Disease Control maintains a web page concerning *Naegleria fowleri* and this web page specifically provides guidance for the proper use of Neti pots and other nasal irrigation devices. The CDC web page can be found at: <http://www.cdc.gov/parasites/naegleria/faqs.html>



## The ADH Conducts Fluoridation Training

On March 14, and March 15, the Arkansas Department of Health conducted a Fluoridation Short School. This training was conducted at the Arkansas Rural Water training facility located at Lonoke. The training consisted of six sections including overview of regulations, fluoride chemicals, feed rate calculations, record keeping, chemical safety, and concentration analysis.

The training was attended by 24 water operators

See Training page 4

## Stage 2 D/DBP Rule Part 2: Operational Evaluations – Benefit or Burden

**Christine Kirkendoll, D/DBPR Technical Support  
Engineer**

In the first article of this three-part series, Stage 2 D/DBPR: Federal Rule and State Policy Breakdown, I briefly discussed operational evaluations, emphasizing the operational evaluation report can and should be more than just a paperwork exercise. In this second article I will go into further detail about what an operational evaluation should entail and how to use the evaluation to your benefit.

The operational evaluation can provide valuable information to assess current operational practices or to plan system modifications or improvements. The evaluation can also provide information for use in developing standard operation procedures, preventative maintenance plans, and asset management plans. State review of operational evaluations can provide valuable insights for use in sanitary surveys, in review of distribution, treatment or source modifications, and in technical and compliance assistance.

The operational evaluation must include an examination of source and source water quality changes. Disinfection Byproducts are formed when organic matter reacts with chlorine and/or bromine. Various factors like pH, alkalinity, and temperature effect this reaction. Evaluating the source for these precursors and factors that have caused them can assist a system in deciding how best to treat or remove the precursors. If a reservoir has a heavy rainfall in spring followed by an algae bloom in summer, they may decide that their source water protection plan may need to be updated to help prevent nutrient loading or they may decide that they need to develop a standard operating procedure for copper sulfate addition to the reservoir. For a system with multiple sources, an evaluation of these can assist to balance the usage to provide the best source water quality. A system with multiple wells they may adjust pumping rates for each well to provide a majority of the system with the best water quality. Source water quality is not strictly limited to untreated water. A consecutive system's source is treated water and an evaluation of the precursors, chlorine levels, factors, or disinfection byproduct levels at the master meter can assist a consecutive system to develop a treatment or control plan for their wholesale system.

The operational evaluation must include an examination of treatment changes or problems that may have occurred. Different systems will have treatment processes as well as different data available to them for regulatory reasons and/or for treatment process control. A surface water system is required to monitor turbidity but a ground water system may only have turbidity data for process control. An evaluation of any or all available data may assist a system to focus its evaluation. For

example, if finished water TOC (total organic carbon) is higher than normal, you may have a problem with the coagulation process. If the chlorine concentration is higher than normal, you may have overfed chlorine for primary disinfection. If there are no obvious changes in the finished water parameters, the cause of the OEL (operational exceedance level) exceedance may be in the distribution system. Consecutive systems may want to obtain treatment data from the wholesaler to help identify the cause of the OEL exceedance. Various treatment processes may affect the water quality entering the system & may include pre-disinfection, pre-sedimentation, coagulation, sedimentation, filtration, primary disinfection and secondary disinfection. These processes build upon each other, so minor treatment changes or problems in one or more processes may not obviously cause an OEL exceedance but when those changes or problems combine, they can cause an exceedance. For example, if a system changes to a coagulant type which creates a flakey floc, this floc can then break up in filtration and become readily available for reaction with chlorine during the primary disinfection process. Simultaneous compliance is a concern for many systems and affects their treatment process control. For example, the optimal pH for manganese oxidation is often higher than the optimal pH for coagulation of dissolved organic matter. Another example of this is selection of coagulant dose for the system. The optimal coagulant dose for turbidity removal is often not the optimal dose to organic matter removal. An evaluation may assist the system in choosing treatment process controls that provide compliance with all rules.

The operational evaluation must include an examination of storage tank operations, excess storage capacity, and flushing. All systems in the state of Arkansas are required to maintain chlorine residual. As a result all systems in the state have the potential to form disinfection byproducts in the distribution system. Various factors like pH, contact time, disinfection residual, and pipeline or storage tank sediment affect disinfection byproduct formation and can be controlled in the distribution system. Different systems will have different data available to them, but most systems should have chlorine residual records, maintenance records, meter readings, and customer complaint records. Some systems may also have pump and tank level records which can be used to determine if storage tank operations contributed to the exceedance. All systems will have at least two monitoring locations for disinfection byproducts, so a comparison of the disinfection byproduct data of these different monitoring points may assist the system to narrow their focus to specific areas of the distribution system. For example, if both the disinfection byproduct level and/or chlorine residual in one area of the system changes without a similar change in other areas of the system, the operator may be able to focus their review of maintenance and operational records to records that affect that specific area of the system instead of reviewing all records. An evaluation of distribution system operations may also assist in the evaluation of treatment operations. For

example, if a system controls its booster chlorination feed rate by the chlorine residual present in the remote parts of the distribution system, an evaluation of storage tank operations and flushing procedures may assist the system in determining a more comprehensive strategy to maintain chlorine residual than only adjusting booster chlorination feed rates.

Finally, the operational evaluation must include an examination of steps that could be considered to minimize future exceedances. The evaluation is conducted to ensure that operational and design changes are chosen that will provide the most impact toward improving water quality and ensuring simultaneous compliance with all rules within the SDWA. Multiple steps may need to be taken simultaneously to create a substantial effect on water quality. For example, if a system changes a treatment process to improve water quality entering the system they may need to make changes to operations in the distribution system to maintain that water quality at the disinfection byproduct monitoring locations. While the evaluation report requires a system to identify steps to be considered to minimize future exceedances, the system is not required to implement those steps. Identification of the steps, however, may assist the system to implement corrective action required by an exceedance of maximum contaminant levels more efficiently.

In conclusion, the operational evaluation can provide valuable information to use in future operational decisions or in planning system modifications or improvements if the evaluation is conducted systematically and without any assumptions toward success or failure. For further information regarding the Stage 1 and Stage 2 DBP Rules, contact Christine Kirkendoll of the Engineering Section.

## REVISED REGULATIONS FINALIZED

The proposed revisions to the Arkansas Department of Health's Rules and Regulations Pertaining to Public Water Systems were adopted by the Board of Health on January 26, 2012. Dr. Paul Halverson, Director of the Arkansas Department of Health, signed the revised Rules and Regulations and they have been filed with the Secretary of State. The effective date for the revised rules and regulations is March 23, 2012.

The revisions to the Rules and Regulations were necessary as a result of Act 197 of 2011 that requires that water systems serving more than 5,000 people fluoridate the water if funding is available to pay for capital expenses. The Delta Dental of Arkansas Foundation is in the process of providing funding for this purpose. A grant application is necessary in order to be considered. The Delta Dental of Arkansas Foundation

webpage can be found at <http://www.ddarfoundation.com>

The Engineering Section of the Arkansas Department of Health will monitor the compliance status of water systems that are subject to the requirements of Act 197 of 2011. A representative of the Engineering Section serves as part of the committee that reviews grant applications submitted to the Delta Dental Foundation of Arkansas. Water systems that are subject to these requirements need to make a good faith effort to comply.

As of Feb 13, 2012, 17 water systems of the 34 water systems affected by these requirements have applied for funding from the Delta Dental of Arkansas Foundation

## Training

Continued from page 2

from various water systems around the state. Water operators were encouraged to bring their own analytical instruments to the training so that the operator could more directly apply the training to the equipment that they will be using.

The ADH provided examples of various feeder types to augment the discussions concerning proper installations and feed rate calculations.

The training class size was limited to 27 persons, so that more hands on training could be provided and ADH received more requests than could be accommodated. The ADH is planning on providing another fluoride short school on June 13 and June 14 It will also be held at the Arkansas Rural Water training facility. If you are interested in registering for this training class, please contact Glenn Greenway at [glenn.greenway@arkansas.gov](mailto:glenn.greenway@arkansas.gov)



Above: Operators work with analytical instruments at the fluoridation training held at Lonoke.

# WATER OPERATOR LICENSE EXAMINATIONS

Most Current Listing is at: [www.healthy.arkansas.gov/eng/autoupdates/oper/operexam.htm](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 20, 2011**. All Treatment and Distribution exam grades will be available at the sessions. Acceptable photo identification (Drivers License or equivalent) will be required to sit for an Exam. Cell phones and other electronic communication devices are not allowed in exam sessions. Non-programmable calculators are allowed.

| Date       | City          | Location  | Start Time |
|------------|---------------|---|------------|
| 4/6/2012   | N Little Rock | CAW Maryland Complex, 1500 West Maryland Ave, NLR       | 9:00 AM    |
| 4/6/2012   | Lonoke        | ARWA Training Facility, 240 Dee Dee Ln                  | 9:00 AM    |
| 4/13/2012  | Russellville  | Tri-County Water, 5306 N Arkansas Ave                   | 9:00 AM    |
| 4/20/2012  | Paragould     | Holiday Inn Express, 3502 Linwood Dr                    | 9:00 AM    |
| 4/27/2012  | Lonoke        | ARWA Training Facility, 240 Dee Dee Ln                  | 9:00 AM    |
| 5/2/2012   | Hot Springs   | AWW&WEA Annual Conf, HS Convention Center               | 9:00 AM    |
| 5/11/2012  | Bono          | Bono Community Center, 100 Woodland Trail               | 9:00 AM    |
| 5/18/2012  | Lonoke        | ARWA Training Facility, 240 Dee Dee Ln                  | 9:00 AM    |
| 5/25/2012  | Clarksville   | CLW (Operations Bld) 710 East Main (Hwy 64 East)        | 9:00 AM    |
| 5/25/2012  | Jonesboro     | Jonesboro CWL Office Training Rm, 400 E Monroe          | 9:00 AM    |
| 6/1/2012   | Russellville  | Tri-County Water, 5306 N Arkansas Ave                   | 9:00 AM    |
| 6/15/2012  | Mtn Home      | Baxter Co OEM Training Facility, 170 Dillard Dr, Midway | 9:00 AM    |
| 6/15/2012  | Van Buren     | Best Western Van Buren Inn, 1903 N. 6th Street          | 9:00 AM    |
| 6/29/2012  | Rogers        | Water Utilities Training Rm, 521 South 2nd Street       | 9:00 AM    |
| 7/13/2012  | Lonoke        | ARWA Training Facility, 240 Dee Dee Ln                  | 9:00 AM    |
| 7/20/2012  | Mtn Home      | Baxter Co OEM Training Facility, 170 Dillard Dr, Midway | 9:00 AM    |
| 7/27/2012  | Fayetteville  | Fayetteville Operations Center, 2435 S Industrial Dr    | 9:00 AM    |
| 7/27/2012  | Rogers        | Water Utilities Training Rm, 521 South 2nd Street       | 9:00 AM    |
| 7/27/2012  | Russellville  | Tri-County Water, 5306 N Arkansas Ave                   | 9:00 AM    |
| 8/10/2012  | Clarksville   | CLW (Operations Bld) 710 East Main (Hwy 64 East)        | 9:00 AM    |
| 8/10/2012  | Paragould     | Holiday Inn Express, 3502 Linwood Dr                    | 9:00 AM    |
| 8/17/2012  | Fayetteville  | Fayetteville Operations Center, 2435 S Industrial Dr    | 9:00 AM    |
| 8/24/2012  | Russellville  | Tri-County Water, 5306 N Arkansas Ave                   | 9:00 AM    |
| 8/29/2012  | Hot Springs   | ARWA Annual Conf, HS Convention Center                  | 9:00 AM    |
| 9/14/2012  | Bono          | Bono Community Center, 100 Woodland Trail               | 9:00 AM    |
| 9/21/2012  | Lonoke        | ARWA Training Facility, 240 Dee Dee Ln                  | 9:00 AM    |
| 9/21/2012  | N Little Rock | CAW Maryland Complex, 1500 West Maryland Ave, NLR       | 9:00 AM    |
| 9/28/2012  | Jonesboro     | Jonesboro CWL Office Training Rm, 400 E Monroe          | 9:00 AM    |
| 9/28/2012  | Lonoke        | ARWA Training Facility, 240 Dee Dee Ln                  | 9:00 AM    |
| 10/12/2012 | Arkadelphia   | Recreation Center, 2575 Twin Rivers Dr                  | 9:00 AM    |
| 10/19/2012 | Mtn Home      | Baxter Co OEM Training Facility, 170 Dillard Dr, Midway | 9:00 AM    |
| 10/19/2012 | N Little Rock | CAW Maryland Complex, 1500 West Maryland Ave, NLR       | 9:00 AM    |
| 10/26/2012 | Rogers        | Water Utilities Training Rm, 521 South 2nd Street       | 9:00 AM    |
| 11/2/2012  | Lonoke        | ARWA Training Facility, 240 Dee Dee Ln                  | 9:00 AM    |
| 11/9/2012  | Maumelle      | Wastewater Plant, 425 B Hyman Drive                     | 9:00 AM    |
| 11/16/2012 | Hot Springs   | HS Transportation Depot, 100 Broadway Terrace           | 9:00 AM    |
| 11/30/2012 | Bono          | Bono Community Center, 100 Woodland Trail               | 9:00 AM    |
| 11/30/2012 | Lonoke        | ARWA Training Facility, 240 Dee Dee Ln                  | 9:00 AM    |

The above exam session information is subject to change. You should confirm this information just prior to the scheduled examination period. You may confirm the exam session and its location by contacting your District Specialist or Engineer at (501) 661-2623. Also, the latest exam schedule information, including future exam sessions, can be viewed on the Internet at: [www.healthy.arkansas.gov/eng/autoupdates/oper/operexam.htm](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 prior to sitting for an exam.

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

Community & Nontransient Noncommunity Public Water Systems, October – December 2011

|                                |               |                                |                  |
|--------------------------------|---------------|--------------------------------|------------------|
| ALICIA WATER SYSTEM            | BMCL 10       | MAUMELLE WATER MANAGEMENT      | DMCL 10,11,12    |
| BARTON LEXA WATER ASSOCIATION  | BMCL 11       | MAYFLOWER WATERWORKS           | DMCL 10,11,12    |
| BELLEVILLE WATER               | Bmon 12       | MORNING STAR WATER ASSOCIATION | FMCL 10,11,12    |
| BENTON COUNTY WATER AUTHORITY5 | BMCL 10       | MOUNT OLIVE WATER ASSOCIATION  | DMCL 10,11,12    |
| BENTON COUNTY WATER AUTHORITY5 | Bmon 11       | MOUNTAINBURG WATER AND SEWER   | BMCL 10          |
| BEULAH GROVE WATER             | Bmon 10       | MURFREESBORO WATERWORKS        | DMCL 10,11,12    |
| BODCAW RURAL WATER SYSTEM      | DMCL 10,11,12 | NORPHLET WATERWORKS            | Bmon 10          |
| BOONEVILLE WATERWORKS          | BMCL 10       | OMAHA WATERWORKS               | BMCL 11          |
| BOONEVILLE WATERWORKS          | BMCL 11       | OPPELO WATER DEPARTMENT        | Bmon 10          |
| CAMDEN WATERWORKS              | BMCL 10       | PERLA WATER ASSOCIATION        | Bmon 12          |
| CHERRY HILL PUBLIC FACILITY BD | DMCL 10,11,12 | SDM WATER ASSOCIATION          | FMCL 10,11,12    |
| COMPTON WATERWORKS             | Bmon10        | SDM WATER ASSOCIATION          | RMCL 10,11,12    |
| CRAWFORDSVILLE WATERWORKS      | Bmon 12       | SEVIER CO WATER ASSOCIATION    | DMCL 10,11,12    |
| CRESTWOOD MOBILE HOME PARK     | BMCL 12       | SOUTH MOUNTAIN WATER ASSN      | RMCL 10,11,12    |
| DANVILLE WATERWORKS            | DMCL 10,11,12 | ST PAUL WATERWORKS             | BMCL 11          |
| DECATUR WATERWORKS             | Bmon 11       | ST PAUL WATERWORKS             | BMon 12          |
| DELIGHT WATERWORKS             | DMCL 10,11,12 | STAMPS WATERWORKS              | Bmon 10          |
| EARLE WATERWORKS               | BMCL 11       | STAR CITY WATER                | Bmon 12          |
| EARLE WATERWORKS               | Bmon 12       | SYLAMORE VALLEY WATER ASSN     | Bmon 10          |
| FRANKLIN-SEBATIAN PWA          | Bmon 10       | TALL OAKS MHP                  | ChemMCL 10,11,12 |
| GARRETT BRIDGE WATER ASSOC     | BMCL 12       | WALDRON WATERWORKS             | DMCL 10,11,12    |
| GRAND PRAIRIE REGIONAL WATER   | GWR 10        | WALDRON WATERORKS              | TMCL 10          |
| GREENBRIER WATERWORKS          | DMCL 10,11,12 | WALKER WATER ASSN              | Bmon 10          |
| GREENWOOD WATERWORKS           | DMCL 10,11,12 | WILSON WATER SYSTEM            | BMCL 12          |
| HEBER SPRINGS WATER SYSTEM     | Bmon 11       | WINSLOW WATERWORKS             | Bmon 12          |
| HOLLY GROVE WATERWORKS         | BMCL 11       |                                |                  |
| HOLLY GROVE WATERORKS          | Bmon 12       |                                |                  |
| HWY 64 WATER ASSN              | Bmon 10       |                                |                  |
| JAMES FORK WATER DIST          | DMCL 10,11,12 |                                |                  |
| LADD WATER ASSN                | BMCL 12       |                                |                  |
| LAKE FOREST SUBOR DIST         | BMCL 10       |                                |                  |
| LESLIE WATER SYSTEM            | BMCL 10       |                                |                  |

**KEY:** Bmon = Bacti Monitoring; BMCL = Bacti MCL; Dmon = Disinfection By Product Rule Monitoring; DMCL=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= Failure to Filter; RMCL = Radiochemical MCL; FMCL = Fluoride MCL; IMCL=Inorganic Chemical MCL; SMCL = Synthetic Chemical MCL; OperLic = Operator Licensing; 10 = Oct, 11 = Nov, 12 = Dec.

## Utilizing The OpCert Training Fund

The OpCert Training Fund covers registration fees, meals, and lodging for mandatory courses for water license exams, backflow tester and backflow specialist courses. Registration fees are eligible for AETA environmental health and safety courses, and utility management course. Registration fees are available for ARWA courses for cave in protection, and confined space.

When registering for eligible training courses, a few simple extra steps are needed to take advantage of the USEPA OpCert Training Assistance Fund. The fund eligibility requirements are: the course must be an approved OpCert course; the individual attending the course must be an operator (volunteer or paid) for a Community, or Non-Community Non-Transient Public Water System serving fewer than 3300 persons; and an overnight hotel stay must be justified. There is presently more than adequate money to cover any and all operators needing training for exams or renewal training hours.

Please contact the training providers shown below to determine your eligibility and to register for eligible course utilizing the fund (a very simply process). You should register well in advance of attending a course. The latest listing of courses can be found on the internet at: [www.healthy.arkansas.gov/eng/autoupdates/oper/opcertlinks.htm](http://www.healthy.arkansas.gov/eng/autoupdates/oper/opcertlinks.htm)

Contact the two eligible trainers at:

AR Environmental Training Academy – Contact Letitia Rusch – (870) 574-4551 – [Irusch@sautech.edu](mailto:Irusch@sautech.edu)  
AR Rural Water Ass'n – Contact Sharon Wakefield – (501) 676-2255 – [info@arkansasruralwater.org](mailto:info@arkansasruralwater.org)

**Free Exam Study Manuals:** If you are an operator for an eligible system, a complete set of exam reference manuals may be available, free of charge. Please contact the Water Licensing Program at (501) 661-2623 to receive the manuals.

# REPORT OF THE Arkansas Drinking Water Advisory and Operator Licensing Committee

The quarterly meeting of the Arkansas Drinking Water Advisory and Operator Licensing Committee held on January 11, 2012 in Lonoke, Arkansas. All Committee members were present and are: Scott Borman, Committee Chair, Benton Washington RPWA; Terry House, Committee Chair Elect, Grand Prairie Bayou Two PFB; Matthew Dunn, P.E., Crist Engineers, Inc.; Tim Shaw, Community Water System; Susan Merideth, P.E., Jonesboro City Water and Light; 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; Gary Oden, SAU Tech for the Arkansas Environmental Training Academy; Jeremy Rowe, AETA; Jay Northern, AETA; Barbara Henson, Walker Creek State Line Water Assn; Charles Grimes, WKSLWA; and Marilyn Bryant, WKSLWA.

## **Standing Business**

The Committee reviewed and approved the minutes from the October 12, 2011 meeting. The Committee reviewed and approved the High School Waiver request from Grimes restricting the waiver to a Grade I Distribution License, the license grade required to operate the Walker Creek State Line Water Association.

Nutt reviewed the EPA OpCert Expense Reimbursement Grant spending. Nutt referred to a spreadsheet that detailed ARWA expenditures for July through October 2011 and AETA expenditures for July through December 2011. The spreadsheet showed projected spending for 2012 noting that those estimates would spend the grant by its expiration. The Committee discussed present spending levels, classes to be held for 2012, and expressed their concerns the grant be spent by its December 2012 expiration. Committee requested Nutt to update them concerning grant spending at the April Committee meeting. Stone then discussed the possible use of SRF Capacity Development funds to continue paying for training courses after the grant expires. He stated funding should be available to fund the present level of courses but would not support reimbursement of travel cost for those attending courses.

Nutt reviewed the Water Operator License Examinations schedule and the Mandatory Training Course schedule for January 2012 thru December 2012. Nutt stated these are for both OpCert and NonOpCert funded training classes. Nutt noted the large number and frequent exam sessions. The Committee had a discussion in support of separating exam sessions from the training courses in the future.

## **Old Business**

Nutt provided a 2011 license renewal update. He provided the Committee a list of license renewals on hold for 2011 requiring training to be documented or attended to justify renewal. Nutt also provided a list of license holders numbering about 300 that had not submitted renewals. He indicated this was in the normal range for operators deciding not to renew each renewal period.

Stone provided the Committee an update on the Fluoridation Law and the progress of PWS Regulation changes to implement it. (Please see related article in this newsletter.)

Borman addressed concerns he had relative to the adequacy of the present Mandatory Training Courses. He stated he would like to see expanded mandatory training hours especially for the Grade III and Grade IV Licenses. Borman indicated that decoupling the exams from the training courses, as discussed earlier, would allow time for courses to be expanded. He also indicated he felt the ADH Compliance Course needed to be expanded to better cover surface water system compliance issues. Discussion followed with the Committee questioning the trainers present if they felt additional training was warranted, the trainers were supportive of expanding certain courses. Stone stated he would look into expanding the Compliance Course. After considerable discussion and it being noted that ARWA was not represented Borman tabled the topic until the next meeting.

## **New Business**

Nutt asked the Committee if the new High School Waiver Form was effective and if it better assisted the Committee in its decision process. The Committee indicated it helped considerably. Nutt requested if there were any additional changes needed or additions to improve the form. The Committee discussed and requested some minor changes to the form.

Nutt updated the Committee on Stone's appointment to the Committee stating the appointment was on the Board of Health agenda for its January 26, 2012 meeting with full expectations Stone would be appointed to the Committee. Nutt indicated he had mailed out nomination requests, in early January, to the industry related operator groups requesting nominations for Borman's expiring position on the Committee. Those nominations will then go to the Board of Health, at its April 2012 meeting, for one to be appointed to the Committee.

## **Committee Reports**

Stone, provided his Section Director's report. He stated when Hart left in September 2011 he got the Fall 2011 Arkansas Drinking Water Update published and the Winter 2011 Arkansas Drinking Water Update went out as scheduled. Stone in his general program update focused on personnel changes and concerns. He informed the Committee that Lance Jones moved to the Chief Engineer position he vacated, and a replacement for Jones' former position of Technical Support Chief was in the process. Stone indicated Engineering at the end of calendar year 2011 had been 85% strength on average for the year. The Section has seen increased turnover in the Environmental Health Specialist position due to ADEQ having a very similar position at a higher pay grade allowing our Specialist to transfer and receive a pay raise. He also noted the process for hiring an individual is very slow, anywhere from two to three months.

Nutt, in his Training & Certification Officer's Report, called the Committee members attention to the exam pass/fail spreadsheet handout. He specifically addressed a new total line, showing performance of exams post the implementation in April of the 2011 version exams. He noted some slippage in pass rates in the very small representative pool that he hopes would be self-healing with a larger pool of examinees over time.

Nutt reviewed a licensing Enforcement Report and noted that the Crabapple Point Water System difficulty in complying had been negated when their status as a Community PWS was changed to a Transient Non-Community PWS, which eliminated the requirement for a licensed operator.

Nutt provided a license program update and Nutt provided a spreadsheet detailing recent license exam performance information. He asked the Committee to look at the 2011 version from April 1, 2011 to present noting the passing rates were down. Committee asked questions and discussed some items concerning the lower percent rates for the exams. Nutt in his enforcement actions update stated there were no enforcement violations approaching the administrative order level on any Water System and the list is shorter on the enforcement handout. Nutt indicated there were about ten (10) Water Systems on the handout who over the last year had enforcement action for no licensed water operator. Nutt in his general program update stated a new Training Coordinator (Environmental Health Specialist position) had been hired and was scheduled to start January 23, 2012. The position has been vacant since late September. He indicated Hampton was doing an excellent job processing Licenses, OIT's and Water Operator Applications.

Rowe, reporting for the Arkansas Environmental Training Academy, passed out the Academy's 2012 Training Schedule for all of the Academy's training including Water, Wastewater, Cross Connection and Environmental Health and Safety. Rowe stated that AETA had a few night courses scheduled for water and it has been having good attendance at its courses.

Arkansas Rural Water Association did not have a representative present. A report was not submitted.

The Committee set its next meeting date for Wednesday, April 11, 2012. With no other business, a motion to adjourn the meeting was received and passed.

## **Arkansas Water Works & Water Environment Association Annual Conference and Short School**

**April 29 to May 2, 2012  
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 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 Basic Water Math course is on Monday and either the Applied Water Math course or the ADH Public Water System Compliance course is 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.

## STAFF NEWS:



Brad Jones recently joined the Engineering Section as an Environmental Health Specialist and will be working in Source Water Protection. Brad received his B.S. in Biology from the University of Alaska Fairbanks. His experience includes eight years as an Environmental Health Specialist for the Grant, Saline, Perry, and Pulaski counties and two years as an inspector at ADEQ.



Alicia Prioleau has joined the Engineering Section as an Environmental Health Specialist and will be working in the water licensing program, primarily as the training coordinator. Alicia has a B.S. in Biology from Grambling State University and a M.S. in Environmental Management from Webster University. Alicia has experience in microbiological, analytical and environmental testing and a comprehensive knowledge of state and federal rules and regulations; applicable to USDA, FDA and EPA compliance.

### Water Operator Licenses Issued

December 1, 2011 through February 29, 2012

| LICENSEE NAME        | GRADE/TYPE      | WATER SYSTEM NAME            |
|----------------------|-----------------|------------------------------|
| BALDWIN RODNEY       | D - IV          | ARKANASAS RURAL WATER ASSN   |
| BOOK ALBERT          | D - III         | WOOSTER WATERWORKS           |
| BRYANT JOHN          | D - II & T - II | WILLISVILLE WATERWORKS       |
| BUFFER LARRY         | D - IV          | GRAVETTE WATERWORKS          |
| BURRUSS BILLY        | D - I           | BRADFORD WATERWORKS          |
| CRISSON TIMOTHY      | T - II          | HUMPHREY WATERWORKS          |
| CRITTENDEN LOUIE     | D - II          | EL DORADO WATERWORKS         |
| GREENWALT DALE       | T - IV          | FORT SMITH WATER UTILITIES   |
| HARTSELL RONALD      | D - II          | TUCKERMAN WATERWORKS         |
| HUFFORD JASON        | T - II          | WOODSON-HENSLEY WATER CO     |
|                      |                 | ARSENAL WATER SYSTEM         |
| HUNTER MATTHEW       | D - I           | MC CRORY WATERWORKS          |
| LANGLEY BENJAMEN     | D - II          | PANGBURN WATERWORKS          |
| LOCKRIDGE BILLY      | D - II          | HARRISON WATERWORKS          |
| MANESS WESLEY        | D - I           | MOUNTAIN PINE WATERWORKS     |
| MCNATT LARRY         | D - I           | ALBEMARLE CORPORATION SOUTH  |
| PARKER SETH          | D - I           | QUITMAN WATERWORKS           |
| RICE RICHARD         | D - VSS         | FORREST CITY WATERWORKS      |
| ROBINSON WILLIAM     | D - III         | MILLTOWN-WASHBURN WATER      |
| SAMPLES JAMES        | D - I           | EMERSON WATERWORKS           |
| SCOTT BRANDON        | D - IV          | BEAVER WATER DISTRICT        |
| SCOTT KATHRYN        | D - VSS         | WINTHROP WATER ASSOCIATION   |
| STAHLMAN CHARLES     | D - I           | BULL SHOALS WATER SYSTEM     |
| STEELY BRADLEY       | D - IV          | COMMUNITY WATER SYSTEM       |
| STUTTS JAMES         | D - I           | WYNNE WATERWORKS             |
| SULLIVAN ROBERT      | D - I           | LONOKE WATERWORKS            |
| TOONE MARK           | D - I           | LAFE RURAL WATER ASSOCIATION |
| WAGNON MICHAEL       | D - II          | NO PWS OF RECORD             |
| WARFORD TERRY        | D - I           | BENTON WATERWORKS            |
| WESTPHAL CYNTHIA     | D - IV          | FORT SMITH WATER UTILITIES   |
| WHISENHUNT III JAMES | D - IV          | FOREMAN WATERWORKS           |
| WHITNER CLEM         | D - II          | HARRISON WATERWORKS          |

# 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.

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

| MANDATORY COURSE NAME           | START DATE | ENDING DATE | OP<br>ERT<br>GRA<br>NT<br>ELI<br>G-<br>IBLE<br>COU<br>RSE | CITY            | LOCATION<br>All courses begin at 8 a.m.   | SPONSOR |
|---------------------------------|------------|-------------|---|-----------------|---|---------|
| Basic Water Math                | 04/02/12   | 04/16/12    | Yes   | Internet        | <a href="http://www.sautech.edu/admin/escience.aspx">http://www.sautech.edu/admin/escience.aspx</a> | AETA    |
| Advanced Water Treatment        | 04/03/12   | 04/05/12    | Yes   | Nth Little Rock | CAW Maryland Complex, 1500 West Maryland Ave  | AETA    |
| Basic Water Distribution        | 04/03/12   | 04/05/12    | Yes   | Lonoke          | ARWA Training Facility, 240 Dee Dee Ln  | ARWA    |
| Basic Water Math                | 04/10/12   | 04/10/12    | Yes   | Rogers          | Water Utilities, 521 South 2nd Street   | ARWA    |
| Basic Water Distribution        | 04/10/12   | 04/12/12    | Yes   | Russellville    | Tri-County Water, 5306 N Arkansas Ave   | AETA    |
| ADH PWS Compliance              | 04/11/12   | 04/11/12    | Yes   | Rogers          | Water Utilities, 521 South 2nd Street   | ARWA    |
| Applied Water Math              | 04/12/12   | 04/12/12    | Yes   | Rogers          | Water Utilities, 521 South 2nd Street   | ARWA    |
| Applied Water Math              | 04/16/12   | 04/30/12    | Yes   | Internet        | <a href="http://www.sautech.edu/admin/escience.aspx">http://www.sautech.edu/admin/escience.aspx</a> | AETA    |
| Basic Water Dist (Night)        | 04/16/12   | 04/20/12    | Yes   | Osceola         | Contact AETA (870) 574-4550   | AETA    |
| Intermediate Water Distribution | 04/17/12   | 04/19/12    | Yes   | Paragould       | Holiday Inn Express, 3502 Linwood Dr  | AETA    |
| Advanced Water Distribution     | 04/24/12   | 04/26/12    | Yes   | Lonoke          | ARWA Training Facility, 240 Dee Dee Ln  | ARWA    |
| Basic Water Math                | 04/30/12   | 04/30/12    | Yes   | Hot Springs     | AWW&WEA Conf, HS Convention Center  | AETA    |
| Applied Water Math              | 05/01/12   | 05/01/12    | Yes   | Hot Springs     | AWW&WEA Conf, HS Convention Center  | AETA    |
| ADH PWS Compliance              | 05/01/12   | 05/01/12    | Yes   | Hot Springs     | AWW&WEA Conf, HS Convention Center  | AETA    |
| Basic Water Treatment           | 05/01/12   | 05/15/12    | Yes   | Internet        | <a href="http://www.sautech.edu/admin/escience.aspx">http://www.sautech.edu/admin/escience.aspx</a> | AETA    |
| Basic Water Distribution        | 05/08/12   | 05/10/12    | Yes   | Bono            | Bono Community Center, 100 Woodland Trail   | ARWA    |
| Basic Water Math                | 05/15/12   | 05/15/12    | Yes   | Van Buren       | Best Western Van Buren, 1903 N 6th St   | AETA    |
| Basic Water Treatment           | 05/15/12   | 05/17/12    | Yes   | Lonoke          | ARWA Training Facility, 240 Dee Dee Ln  | ARWA    |
| Basic Water Distribution        | 05/16/12   | 05/31/12    | Yes   | Internet        | <a href="http://www.sautech.edu/admin/escience.aspx">http://www.sautech.edu/admin/escience.aspx</a> | AETA    |
| Applied Water Math              | 05/16/12   | 05/16/12    | Yes   | Van Buren       | Best Western Van Buren, 1903 N 6th St   | AETA    |
| ADH PWS Compliance              | 05/17/12   | 05/17/12    | Yes   | Van Buren       | Best Western Van Buren, 1903 N 6th St   | AETA    |
| Basic Water Treatment (Night)   | 05/21/12   | 05/25/12    | Yes   | Osceola         | Contact AETA (870) 574-4550   | AETA    |
| Basic Water Distribution        | 05/22/12   | 05/24/12    | Yes   | Clarksville     | CLW (Operations Bld) 710 East Main (Hwy 64 East)  | ARWA    |
| Advanced Water Distribution     | 05/22/12   | 05/24/12    | Yes   | Jonesboro       | Jonesboro CWL Office Training Rm, 400 E Monroe  | AETA    |
| Intermediate Water Distribution | 05/29/12   | 05/31/12    | Yes   | Russellville    | Tri-County Water, 5306 N Arkansas Ave   | AETA    |
| Intermediate Water Treatment    | 06/01/12   | 06/15/12    | Yes   | Internet        | <a href="http://www.sautech.edu/admin/escience.aspx">http://www.sautech.edu/admin/escience.aspx</a> | AETA    |
| Basic Water Math                | 06/05/12   | 06/05/12    | Yes   | Fayetteville    | Fayetteville Operations Center, 2435 S Industrial Dr  | AETA    |
| Applied Water Math              | 06/06/12   | 06/06/12    | Yes   | Fayetteville    | Fayetteville Operations Center, 2435 S Industrial Dr  | AETA    |
| ADH PWS Compliance              | 06/07/12   | 06/07/12    | Yes   | Fayetteville    | Fayetteville Operations Center, 2435 S Industrial Dr  | AETA    |
| Intermediate Water Distribution | 06/12/12   | 06/14/12    | Yes   | Mtn Home        | Baxter Co OEM Training Facility, 170 Dillard Dr, Midway   | ARWA    |
| Basic Water Treatment           | 06/12/12   | 06/14/12    | Yes   | Van Buren       | Best Western Van Buren, 1903 N 6th St   | AETA    |
| Intermediate Water Distribution | 06/15/12   | 06/29/12    | Yes   | Internet        | <a href="http://www.sautech.edu/admin/escience.aspx">http://www.sautech.edu/admin/escience.aspx</a> | AETA    |
| Intermediate Water Dist (Night) | 06/18/12   | 06/28/12    | Yes   | Fort Smith      | Fort Smith Utilities, 3900 Kelly Hwy  | AETA    |
| Basic Water Distribution        | 06/26/12   | 06/28/12    | Yes   | Rogers          | Water Utilities, 521 South 2nd Street   | ARWA    |
| Basic Water Math                | 06/26/12   | 06/26/12    | Yes   | Lonoke          | ARWA Training Facility, 240 Dee Dee Ln  | ARWA    |
| Applied Water Math              | 06/27/12   | 06/27/12    | Yes   | Lonoke          | ARWA Training Facility, 240 Dee Dee Ln  | ARWA    |
| A ADH PWS Compliance            | 06/28/12   | 06/28/12    | Yes   | Lonoke          | ARWA Training Facility, 240 Dee Dee Ln  | ARWA    |
| Advanced Water Treatment        | 07/02/12   | 07/16/12    | Yes   | Internet        | <a href="http://www.sautech.edu/admin/escience.aspx">http://www.sautech.edu/admin/escience.aspx</a> | AETA    |
| Advanced Water Dist(Night)      | 07/09/12   | 07/19/12    | Yes   | Fort Smith      | Fort Smith Utilities, 3900 Kelly Hwy  | AETA    |
| Intermediate Water Treatment    | 07/10/12   | 07/12/12    | Yes   | Lonoke          | ARWA Training Facility, 240 Dee Dee Ln  | ARWA    |
| Advanced Water Distribution     | 07/17/12   | 07/31/12    | Yes   | Internet        | <a href="http://www.sautech.edu/admin/escience.aspx">http://www.sautech.edu/admin/escience.aspx</a> | AETA    |
| Basic Water Math                | 07/17/12   | 07/17/12    | Yes   | Paragould       | Holiday Inn Express, 3502 Linwood Dr  | AETA    |
| Advanced Water Distribution     | 07/17/12   | 07/19/12    | Yes   | Mtn Home        | Baxter Co OEM Training Facility, 170 Dillard Dr, Midway   | ARWA    |
| Applied Water Math              | 07/18/12   | 07/18/12    | Yes   | Paragould       | Holiday Inn Express, 3502 Linwood Dr  | AETA    |
| ADH PWS Compliance              | 07/19/12   | 07/19/12    | Yes   | Paragould       | Holiday Inn Express, 3502 Linwood Dr  | AETA    |
| Intermediate Water Treatment    | 07/24/12   | 07/26/12    | Yes   | Russellville    | Tri-County Water, 5306 N Arkansas Ave   | AETA    |
| Basic Water Distribution        | 07/24/12   | 07/26/12    | Yes   | Fayetteville    | Fayetteville Operations Center, 2435 S Industrial Dr  | AETA    |
| Intermediate Water Distribution | 07/24/12   | 07/26/12    | Yes   | Rogers          | Water Utilities, 521 South 2nd Street   | ARWA    |

|                                 |          |          |     |                 |   |      |
|---------------------------------|----------|----------|-----|-----------------|---|------|
| Basic Water Math                | 08/01/12 | 08/15/12 | Yes | Internet        | <a href="http://www.sautech.edu/admin/escience.aspx">http://www.sautech.edu/admin/escience.aspx</a> | AETA |
| Intermediate Water Distribution | 08/07/12 | 08/09/12 | Yes | Clarksville     | CLW (Operations Bld) 710 East Main (Hwy 64 East)  | ARWA |
| Basic Water Treatment           | 08/07/12 | 08/09/12 | Yes | Paragould       | Holiday Inn Express, 3502 Linwood Dr  | AETA |
| Intermediate Water Distribution | 08/14/12 | 08/16/12 | Yes | Fayetteville    | Fayetteville Operations Center, 2435 S Industrial Dr  | AETA |
| Applied Water Math              | 08/16/12 | 08/31/12 | Yes | Internet        | <a href="http://www.sautech.edu/admin/escience.aspx">http://www.sautech.edu/admin/escience.aspx</a> | AETA |
| Advanced Water Treatment        | 08/21/12 | 08/23/12 | Yes | Russellville    | Tri-County Water, 5306 N Arkansas Ave   | AETA |
| Basic Water Math                | 08/21/12 | 08/21/12 | Yes | Lonoke          | ARWA Training Facility, 240 Dee Dee Ln  | ARWA |
| Applied Water Math              | 08/22/12 | 08/22/12 | Yes | Lonoke          | ARWA Training Facility, 240 Dee Dee Ln  | ARWA |
| ADH PWS Compliance              | 08/23/12 | 08/23/12 | Yes | Lonoke          | ARWA Training Facility, 240 Dee Dee Ln  | ARWA |
| Basic Water Treatment           | 09/03/12 | 09/17/12 | Yes | Internet        | <a href="http://www.sautech.edu/admin/escience.aspx">http://www.sautech.edu/admin/escience.aspx</a> | AETA |
| Basic Water Math                | 09/04/12 | 09/04/12 | Yes | Maumelle        | Wastewater Plant Training Rm, 425 B Hyman Drive   | AETA |
| Applied Water Math              | 09/05/12 | 09/05/12 | Yes | Maumelle        | Wastewater Plant Training Rm, 425 B Hyman Drive   | AETA |
| ADH PWS Compliance              | 09/06/12 | 09/06/12 | Yes | Maumelle        | Wastewater Plant Training Rm, 425 B Hyman Drive   | AETA |
| Intermediate Water Distribution | 09/11/12 | 09/13/12 | Yes | Bono            | Bono Community Center, 100 Woodland Trail   | ARWA |
| Basic Water Distribution        | 09/17/12 | 10/01/12 | Yes | Internet        | <a href="http://www.sautech.edu/admin/escience.aspx">http://www.sautech.edu/admin/escience.aspx</a> | AETA |
| Advanced Water Distribution     | 09/18/12 | 09/20/12 | Yes | Nth Little Rock | CAW Maryland Complex, 1500 West Maryland Ave  | AETA |
| Advanced Water Treatment        | 09/18/12 | 09/20/12 | Yes | Lonoke          | ARWA Training Facility, 240 Dee Dee Ln  | ARWA |
| Intermediate Water Treatment    | 09/25/12 | 09/27/12 | Yes | Jonesboro       | Jonesboro CWL Office Training Rm, 400 E Monroe  | AETA |
| Basic Water Distribution        | 09/25/12 | 09/27/12 | Yes | Lonoke          | ARWA Training Facility, 240 Dee Dee Ln  | ARWA |
| Intermediate Water Treatment    | 10/01/12 | 10/15/12 | Yes | Internet        | <a href="http://www.sautech.edu/admin/escience.aspx">http://www.sautech.edu/admin/escience.aspx</a> | AETA |
| Basic Water Math                | 10/02/12 | 10/02/12 | Yes | Lonoke          | ARWA Training Facility, 240 Dee Dee Ln  | ARWA |
| Applied Water Math              | 10/03/12 | 10/03/12 | Yes | Lonoke          | ARWA Training Facility, 240 Dee Dee Ln  | ARWA |
| ADH PWS Compliance              | 10/04/12 | 10/04/12 | Yes | Lonoke          | ARWA Training Facility, 240 Dee Dee Ln  | ARWA |
| Advanced Water Distribution     | 10/09/12 | 10/11/12 | Yes | Arkadelphia     | Recreation Center, 2555 Twin Rivers Dr.   | ARWA |
| Basic Water Math                | 10/09/12 | 10/09/12 | Yes | Hot Springs     | HS Transportation Depot, 100 Broadway Terrace   | AETA |
| Applied Water Math              | 10/10/12 | 10/10/12 | Yes | Hot Springs     | HS Transportation Depot, 100 Broadway Terrace   | AETA |
| ADH PWS Compliance              | 10/11/12 | 10/11/12 | Yes | Hot Springs     | HS Transportation Depot, 100 Broadway Terrace   | AETA |
| Intermediate Water Distribution | 10/16/12 | 10/31/12 | Yes | Internet        | <a href="http://www.sautech.edu/admin/escience.aspx">http://www.sautech.edu/admin/escience.aspx</a> | AETA |
| Basic Water Treatment           | 10/16/12 | 10/18/12 | Yes | Nth Little Rock | CAW Maryland Complex, 1500 West Maryland Ave  | AETA |
| Basic Water Treatment           | 10/16/12 | 10/18/12 | Yes | Mtn Home        | Baxter Co OEM Training Facility, 170 Dillard Dr, Midway   | ARWA |
| Advanced Water Distribution     | 10/23/12 | 10/25/12 | Yes | Rogers          | Water Utilities, 521 South 2nd Street   | ARWA |
| Intermediate Water Treatment    | 10/30/12 | 11/01/12 | Yes | Lonoke          | ARWA Training Facility, 240 Dee Dee Ln  | ARWA |
| Advanced Water Treatment        | 11/01/12 | 11/15/12 | Yes | Internet        | <a href="http://www.sautech.edu/admin/escience.aspx">http://www.sautech.edu/admin/escience.aspx</a> | AETA |
| Intermediate Water Treatment    | 11/06/12 | 11/08/12 | Yes | Maumelle        | Wastewater Plant Training Rm, 425 B Hyman Drive   | AETA |
| Basic Water Distribution        | 11/13/12 | 11/15/12 | Yes | Hot Springs     | HS Transportation Depot, 100 Broadway Terrace   | AETA |
| Advanced Water Distribution     | 11/16/12 | 11/30/12 | Yes | Internet        | <a href="http://www.sautech.edu/admin/escience.aspx">http://www.sautech.edu/admin/escience.aspx</a> | AETA |
| Basic Water Math                | 11/27/12 | 11/27/12 | Yes | Russellville    | Tri-County Water, 5306 N Arkansas Ave   | AETA |
| Advanced Water Distribution     | 11/27/12 | 11/29/12 | Yes | Bono            | Bono Community Center, 100 Woodland Trail   | ARWA |
| Intermediate Water Treatment    | 11/27/12 | 11/29/12 | Yes | Lonoke          | ARWA Training Facility, 240 Dee Dee Ln  | ARWA |
| Applied Water Math              | 11/28/12 | 11/28/12 | Yes | Russellville    | Tri-County Water, 5306 N Arkansas Ave   | AETA |
| ADH PWS Compliance              | 11/29/12 | 11/29/12 | Yes | Russellville    | Tri-County Water, 5306 N Arkansas Ave   | AETA |
| Basic Water Math                | 12/03/12 | 12/17/12 | Yes | Internet        | <a href="http://www.sautech.edu/admin/escience.aspx">http://www.sautech.edu/admin/escience.aspx</a> | AETA |
| Applied Water Math              | 12/03/12 | 12/17/12 | Yes | Internet        | <a href="http://www.sautech.edu/admin/escience.aspx">http://www.sautech.edu/admin/escience.aspx</a> | AETA |
| Basic Water Treatment           | 12/04/12 | 12/06/12 | Yes | Nashville       | Carter Day Center, 200 Nichols Drive  | ARWA |
| Advanced Water Treatment        | 12/04/12 | 12/06/12 | Yes | Nth Little Rock | CAW Maryland Complex, 1500 West Maryland Ave  | AETA |
| Advanced Water Distribution     | 12/11/12 | 12/13/12 | Yes | Clarksville     | CLW (Operations Bld) 710 East Main (Hwy 64 East)  | ARWA |
| Basic Water Distribution        | 12/11/12 | 12/13/12 | Yes | Camden          | AR Env Training Academy, 100 Carr Road  | AETA |

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

All courses require pre-registration. All courses begin at 8:00 AM.

The course sponsor must be contacted to register for each course and to confirm course information that is subject to change or cancellation. Contact information for the sponsors is shown below:

ADH – Arkansas Department of Health – Contact Martin Nutt – (501) 661-2623 – [martin.nutt@arkansas.gov](mailto:martin.nutt@arkansas.gov)

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

ARWA – Arkansas Rural Water Association – Contact Sharon Wakefield – (501) 676-2255 – [info@arkansasruralwater.org](mailto:info@arkansasruralwater.org)

Additional courses are shown on the internet at: [www.healthy.arkansas.gov/eng/autoupdates/oper/mandtrngall.htm](http://www.healthy.arkansas.gov/eng/autoupdates/oper/mandtrngall.htm)

Return Service Requested

PRINTED ON RECYCLED PAPER

AWW&WEA District Meetings

See also the Division's web site [www.healthyarkansas.com/eng/](http://www.healthyarkansas.com/eng/) for updates.

| DATE              | TIME     | CITY            | LOCATION                     | SPONSOR                         |
|-------------------|----------|-----------------|------------------------------|---------------------------------|
| <u>April 2012</u> |          |                 |                              |                                 |
| 5                 | 5:00 PM  | to be announced | to be announced              | Central District, AWW&WEA       |
| 5                 | 6:30 PM  | Fort Smith      | Golden Corral                | Western District, AWW&WEA       |
| 11                | 8:30 AM  | Rogers          | Rogers Activity Center       | Northwest 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  | Forrest City    | Wastewater Plant             | Eastern District, AWW&WEA       |
| n/a               | n/a      | n/a             | n/a                          | Southeast District, AWW&WEA     |
| 19                | 10:30 AM | Jonesboro       | Johnson Street Service Bldg. | Northeast District, AWW&WEA     |
| 26                | 5:30 PM  | Texarkana       | The Ole Feed House           | Southwest District, AWW&WEA     |
| <u>May 2012</u>   |          |                 |                              |                                 |
| 3                 | 5:00 PM  | to be announced | to be announced              | Central District, AWW&WEA       |
| n/a               | n/a      | n/a             | n/a                          | Western District, AWW&WEA       |
| n/a               | n/a      | n/a             | n/a                          | Northwest District, AWW&WEA     |
| 10                | 5:30 PM  | Stuttgart       | Stuttgart Art Center         | Eastern District, AWW&WEA       |
| 10                | 5:00 PM  | Russellville    | Western Sizzlin              | AR Valley District, AWW&WEA     |
| 10                | 5:00 PM  | Pleasant Plains | Tadpole's Catfish Barn       | North Central District, AWW&WEA |
| 15                | 6:30 PM  | Watson Chapel   | Water Shop                   | Southeast District, AWW&WEA     |
| 17                | 12:30 PM | Pocahontas      | Hillcrest-Beverly's Catering | Northeast District, AWW&WEA     |
| 24                | 5:30 PM  | Arkadelphia     | Western Sizzlin              | Southwest District, AWW&WEA     |
| <u>June 2012</u>  |          |                 |                              |                                 |
| 7                 | 5:00 PM  | to be announced | to be announced              | Central District, AWW&WEA       |
| 7                 | 6:00 PM  | Fort Smith      | Columbus Acres               | Western District, AWW&WEA       |
| 13                | 8:30 AM  | Green Forest    | Green Forest Middle School   | Northwest District, AWW&WEA     |
| 14                | 5:00 PM  | Russellville    | Western Sizzlin              | AR Valley District, AWW&WEA     |
| 14                | 5:00 PM  | Pleasant Plains | Tadpole's Catfish Barn       | North Central District, AWW&WEA |
| 14                | 5:30 PM  | Wynne           | Kelly's Restaurant           | Eastern District, AWW&WEA       |
| 19                | 6:30 PM  | Monticello      | Q & Y House                  | Southeast District, AWW&WEA     |
| 21                | 12:30 PM | Jonesboro       | Ron's Catfish                | Northeast District, AWW&WEA     |
| 28                | 5:30 PM  | Foreman         | Forman Community Center      | Southwest District, AWW&WEA     |