ARKANSAS
DRINKING WATER UPDATE

Volume 24, No. 2 *ENGINEERING SECTION – DEPARTMENT OF HEALTH* *Summer 2011*

Interstate 40 in eastern Arkansas was closed in one or both directions for 7 days beginning in April due to flooding. Photo - U.S. Geological Survey

52 counties declared disaster area; FEMA public assistance available

Severe storms in April and May in the state resulted in flooding, wind and tornado damage in a number of areas. As of early June, 52 Arkansas counties had federal disaster declarations, and Governor Mike Beebe had submitted a request for declarations in two additional counties. A listing of the declared counties along with Federal Emergency Management Agency information on how local governments and certain nonprofit organizations can apply for reimbursement for debris clean up and infrastructure repair can be found at www.fema.gov/government/grant/pa/index.shtm. Applications for assistance must be filed within 30 days of the disaster declaration for that area. ♦

See related article on flooding, page 3.

Infrastructure Needs Survey reminder

If your water utility was one of the 83 Arkansas systems selected by EPA to participate in the 2011 Drinking Water Infrastructure Needs Survey, the time to complete your survey is now. To date, approximately 50% of the systems have responded with their information.

The survey is conducted by EPA every four years and is designed to document the 20 year capital improvements needs of public water systems eligible under the State Revolving Loan Fund program. Eligible SRF projects include those to protect public health, to provide compliance with a Safe Drinking Water Act requirement or for energy efficiency. In addition to providing loan funds for construction, portions of the SRF capitalization grant are used to fund the Department of Health's public water system supervision program and are critical for its continued viability.

If you have questions about the survey or need help in completing it, please call Teresa Lee at 501-280-4128, or email her at Teresa.Lee@arkansas.gov.

Request before Board of Health to begin fluoride reg revision

The State Board of Health will review a request at its July meeting from Department of Health staff to begin the process for revising the *Rules and Regulations Pertaining to Public Water Systems*. The request is being made in response to Act 197 of 2011 which requires fluoridation by public water systems serving a population greater than 5000.

The Board is scheduled to meet on July 28. Approval of the Board is required under the Department's administrative procedures policy in order to begin a revision of a regulation. Besides the initial approval by the Board, that process includes notification of the public, a public hearing, and legislative committee reviews before coming back to the Board for final approval.

Act 197 stipulates that the Board adopt rules to establish the permissible concentration of fluoride in drinking water and to establish requirements for equipment, recordkeeping, reporting and testing.

The draft language proposed for review by the Board is found on page 2. If Board of Health permission to proceed is granted, water systems will

See **Fluoridation** on page 2

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Fluoridation

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receive a separate notice on the proposed change in addition to a notice being placed in the statewide newspaper for a public hearing. The date and location for the public hearing have not yet been determined.

Act 197 stipulates that impacted water systems do not have to comply until sufficient outside funds other than tax or service revenue from the city or utility are available to pay capital start-up costs.

Delta Dental of Arkansas has pledged $2 million to assist in paying those start-up costs and has already sent application forms for its grant program to the 34 water systems in Arkansas that would be impacted by Act 197. To date, five systems have submitted an application.

A Delta Dental committee has been formed to review the grant applications. The committee consists of Ed Choate – President and CEO of Delta Dental; Dennis Sternberg – Executive Director / Arkansas Rural Water Association; Jim Ferguson, P.E. – Director of Engineering / Central Arkansas Water; Glenn Greenway, P.E. – Engineering Section / Arkansas Department of Health; Lynn Mouden, DDS – Director of the Office of Oral Health / Arkansas Department of Health; and Edie Arey – Professional Relations Director / Delta Dental. The Committee's first meeting for the review of applications was scheduled for late June. ♦

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

Draft language for review by the State Board of Health:

to modify the

Rules and Regulations Pertaining to Public Water Systems

VII. Operation

F. Fluoridation

In accordance with Act 197 of 2011 (§ 20-7-136) , the owner of a public water system that produces and treats raw water and that directly or through a consecutive system or systems supplies five thousand (5,000) persons or more shall implement a fluoridation program so as to maintain an optimum fluoride concentration in the water. For such systems and for any public water system that controls the fluoride concentration, the optimum concentration shall be 0.7 milligrams per liter with a control range of 0.6 milligrams per liter to 1.2 milligrams per liter.

A public water system that controls the fluoride concentration shall comply with the applicable sections of this regulation. In addition, such public water systems shall comply with the fluoride equipment, record keeping, testing, reporting and related requirements identified as a "must" for Community Public Water Systems contained in Sections II, III, and IV of *Engineering and Administrative Recommendations for Water Fluoridation*, 1995, Centers for Disease Control and Prevention except that entry point rather than distribution system monitoring shall be utilized for measuring the fluoride concentration. Other exceptions on a case- by-case basis may be necessary but only as specified in writing by the Arkansas Department of Health.

Pursuant to § 20-7-136 (d) and (e), implementation of a fluoridation program is not required: 1) until funds sufficient to pay capital start-up costs for fluoridation equipment for the system have become available from any source other than tax revenue or service revenue collected by the water system or the entity which owns or controls it; or 2) for a water system in this state that receives its water from a community in another state until a substantially similar fluoridation program is enacted in the other state. Reasonable items for fluoridation start-up include, but are not limited to: piping, feeder, chemical storage, safety, testing and related equipment and facilities if indispensible to the proper and safe addition and handling of fluoride compounds.

ADEQ seeks surface water quality data

Under Section 303d of the federal Clean Water Act, the Arkansas Department of Environmental Quality issues a report every two years of streams and lakes in the state which do not meet state water quality standards. Such degraded water bodies are classified as 'impaired' with the cause for the degradation often being a point or nonpoint pollution source. Past reports have included several drinking water sources.

Impaired streams are targeted for watershed protection efforts by state and federal agencies, and a closer look is made by ADEQ of the entities which hold a permit for discharging to those streams and lakes. A lack of information about water quality in the state could potentially mean a drinking water source is being degraded but that ADEQ was not aware of the degradation.

Because public water systems routinely collect and analyze raw water quality samples from their source, their data is eligible to be considered for inclusion in ADEQ's monitoring network. Steve Drown, Manager of ADEQ's Water Division, said that in order for ADEQ to consider the use of data from public water systems, his agency would need to know the analytical method utilized and also information about the quality control measures used in the collection and storage of the samples.

Water systems interested in providing such information can contact Drown (drown@adeq.state.ar.us) or Sarah Clem (clem@adeq.state.ar.us).

ADH lists decade's top ten public health achievements

The Arkansas Department of Health has published what it views as the top ten achievements in public health in the first decade of the 21st Century. In evaluating the measures, the agency defined public health as "..the science and practice of protecting and improving the health of a community by preventive medicine, health education, control of communicable diseases, application of sanitary measures and monitoring of environmental hazards." All Arkansans are viewed as clients in the agency's promotion of public health.

In the preface to the report, the top ten list achievements were cited as being the work of many people with a common vision for a healthier future rather than any one agency, individual, or organization. With these successes, the report states it is hoped that Arkansas will move up from the near bottom ranking the state has traditionally held in national health measurement studies.

The list consists of:

1. Coalition for a Healthier Arkansas Today (CHART) Plan: The Tobacco Master Settlement Agreement.
2. Reduction of adult and youth tobacco use.
3. Passage of the Clean Indoor Air Act.
4. Hometown Health Improvement.
5. 2009 influenza immunization program.
6. Expansion of newborn screening program.
7. Act 1220 of 2003 to combat childhood obesity.
8. Arkansas Public Health Laboratory.
9. Public health preparedness.
10. Statewide trauma system: a system for saving lives.

The details on each achievement can be found at the ADH's website: http://www.healthy.arkansas.gov/aboutADH/Documents/top10/TopTenreport.pdf .

Report on emergency response exercise calls for improved planning

Among a number of action items proposed in a draft follow-up report to an emergency response exercise held last year, better planning by utilities and aid agencies topped the list. The exercise, Arkansas Emergency Response / Recovery Exercise for the Water Section '10, was held last November and involved a number of state, federal, and local agencies as well as water and wastewater utilities. The exercise simulated a New Madrid earthquake in northeast Arkansas and examined the participants' response and recovery activities in three separate time phases after the earthquake.

The report contained a number of recommendations for participants in the areas of resources and training, but the list in the planning area far exceeded the first two. Among the report's recommendations:

- Improved understanding and use of the National Incident Management System (NIMS) for defining authority and communications.
- Improved coordination among response agencies.
- Improved public communication strategies.
- Update of emergency response plans
- Improved definition of roles during recovery and restoration.
- More frequent training and exercise opportunities for the water sector.

A copy of the after action report can be obtained at https://www.thetestportal.com/aerews or by contacting Robert Hart with the Engineering Section.

Capacity Development: how your system can benefit

Teresa Lee, P.E., Engineer Supervisor

The Department of Health offers technical assistance, free of charge, to small public water systems serving populations under 10,000 under its Capacity Development Program. The purpose of this program is to help small systems develop the ability to achieve and maintain compliance with national primary and secondary drinking water regulations and to attain a level of self-sufficiency in the areas of financial, technical, and managerial capacity.

The primary funds for this assistance come from the Drinking Water State Revolving Fund's set-asides. The Department of Health and its contractors under this program currently offer assistance which includes, but is not limited to, the following areas.

- Infrastructure mapping
- Rate studies
- Budget analysis
- Capital improvement plans
- Asset management plans
- Long range plans
- Emergency response plans
- Consolidation and restructuring
- Leak detection
- Cross-connection programs
- Assistance with equipment
- Assistance with sampling techniques and site plans
- Assistance with operational reports
- On-site peer-to-peer training
- Board Member or City Council Training

The services will be provided to systems that are placed on a need-based priority list. If you are interested in obtaining assistance from our Capacity Development program, or would like more information, please contact Andrew Gibbons, Capacity Development Coordinator, at 501-280-4428, or you may email Andrew at Andrew.Gibbons@arkansas.gov. ♦

Chemical Safety Resources

Jeff Stone, P.E., Chief Engineer

In Arkansas, there have been two recent chemical related accidents at water treatment plants. At one treatment plant, an improperly installed (and unapproved) caustic soda feed system introduced high levels of caustic soda into the treated water and this resulted in injuries to citizens of the community due to the resulting high pH of the treated water. At another treatment plant, mistakes made in off-loading a bulk chemical, an acid, into a bulk bleach tank, a base, resulted in a chemical reaction that exposed a worker to chlorine gas that was liberated by the resulting chemical reaction. *See article below.*

The second of these accidents could have been prevented by a rigorously followed "Standard Operating Procedures" concerning the off-loading of chemical supplies. Chemical safety must be a priority for all water systems utilizing hazardous chemicals and there are few systems that don't use them.

The purpose of this article is to point out chemical safety resources that are readily available to assist water systems in better understanding chemical labeling and to help to ensure that accidents are avoided.

Water treatment plants have, over time, become potentially more hazardous as treatment schemes have evolved to more frequently utilize chemicals in highly basic or highly acidic solutions. In many cases, these hazardous liquid feed systems have displaced overall less hazardous powder feed systems. Examples include the use of liquid caustic soda instead of powdered hydrated lime, and the use of liquid hydrofluorosilicic acid instead of the granular sodium silicofluoride. Liquid hazardous chemicals, which are chemically incompatible with each other, are often stored on-site in larger containers or in bulk storage tanks. The more frequent use of such chemicals result in a greater likelihood of a violent acid-base reaction if the undiluted chemicals are accidently mixed.

In addition, strong acids and bases present a significant personal safety hazard to water treatment plant worker. The corrosive effects on human tissue from hazardous chemicals or the fumes they give off can be devastating, irreparable, and potentially fatal.

These hazards are in addition to the long standing hazard presented by the necessary use of chlorine in the water treatment process. As these potential hazards increase, it is imperative that water systems ensure that the safety of employees as well as the safety of the community is maintained through proper design, maintenance, training, and development of standard operating procedures (SOPs).

It is the responsibility of any water system utilizes hazardous chemicals to have an adequate and effective safety program. The following items describe a few sources of information that are available to help in building an effective safety program.

Arkansas Department of Labor: In Arkansas, the regulatory body involved in workplace safety is the Arkansas Department of Labor's Arkansas Occupational Safety and Health Program (AOSH). The requirements of the Department of Labor can be found at: http://www.arkansas.gov/labor/divisions/aosh_pl.html

Many of the AOSH's requirements can be found in "Safety Code #12" which is downloadable from their website. Included in those requirements are: a written hazard communication program, labeling of hazardous chemicals, provision of Material Safety Data Sheets (MSDS), training of employees, provision of protective equipment, establishing appropriate work practices and emergency procedures, and annual refresher training.

It is the responsibility of every water system to comply with the AOSH's requirements. AOSH offers safety training which is free to public sector employees. Also, such training would count towards water operator license renewal if properly documented for renewal purposes.

Chemical Labeling: All hazardous chemicals are required to be labeled and those labels provide useful information concerning the level and type of hazard presented by the

Chemical delivery cross connection results in chlorine gas release

Glenn Greenway, P.E., Engineer Supervisor

A failure to follow basic operating procedures likely led to a chlorine release at a small water treatment plant in Lonoke County in the month of April which sent one person to the hospital. Hydrofluorosilicic acid which is added at the treatment plant to control the fluoride concentration was accidently introduced to a bulk storage tank of industrial strength bleach used at the treatment plant for disinfection. The person delivering the chemical saw a chemical reaction occurring in the bleach tank and immediately turned the transfer pump off. Only about 15 gallons of hydrofluorosilicic acid was pumped into the bleach storage tank, but that was enough to cause the release of chlorine gas in amounts significant enough to result in the evacuation of the water treatment plant and a residential area for several blocks down wind of the water treatment plant. A water operator for the system was treated and released from a local hospital for chlorine inhalation.

How did this incident happen? A shipment of two chemical totes of industrial bleach and one of hydrofluorosilicic acid (HSF) was sent to the water treatment plant by the chemical supplier. Each tote contained approximately 400 gallons of chemical. The water system normally receives a much smaller 40 gallon carboy of HSF since bulk storage of HSF is not utilized at the water treatment plant. The chemical deliveryman didn't realize that he had one tote of HSF on the truck but apparently assumed

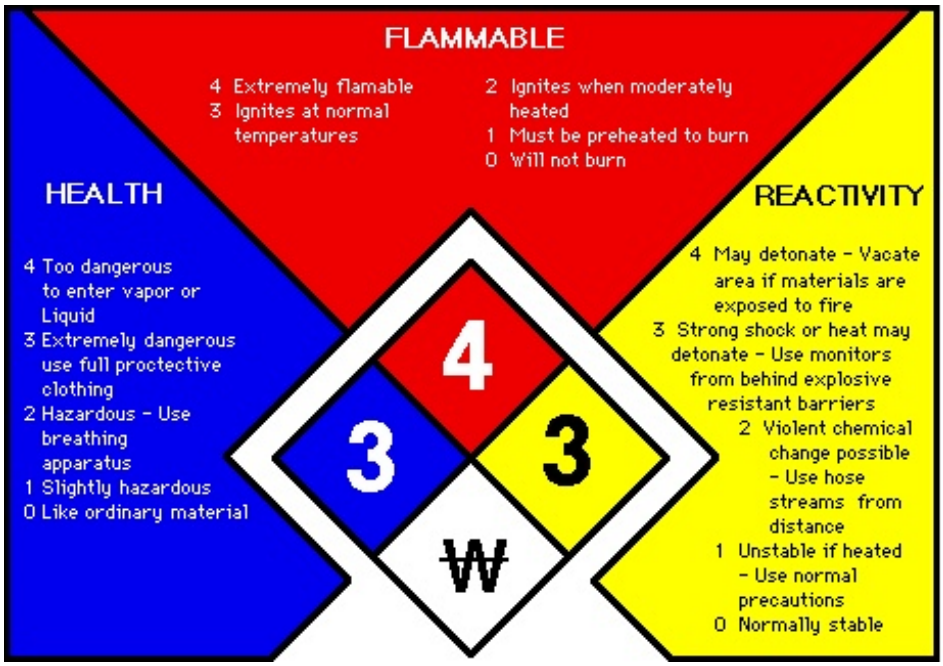
See **Chlorine gas release** page 6

chemical. Presented here is the National Fire Protection Association's (NFPA) diamond that is commonly part of the labeling for hazardous chemicals. The numbers presented in this graphic do not relate to a specific chemical but rather are presented for the purposes of an example.

As can be seen in the adjacent graphic, each section of the diamond represents a different area of hazard. The blue area is for health exposure or toxicity, red has to do with flammability, and yellow represent reactivity or chemical stability. The higher the number, from 0 to 4, the higher the degree of hazard. The white section of the diamond is the location for other indicators such as the one depicted which means don't add water, or OX for oxidizer. Some non-standard indicators are also occasionally found in the white section.

Water operators can educate themselves regarding the NFPA diamond label and the information presented on it by reviewing websites such as http://www.nfpa.org/faq.asp?categoryID=928 ; or http://en.wikipedia.org/wiki/NFPA_74 .

Employees in the work place should be familiar with the hazard ratings of the chemicals that they are working with, and the corresponding safety procedures and protective equipment that are appropriate for the level of hazard indicated. Although all sections of the diamond are important, the hazard rating found in the blue section (health) directly relates to the level of protective equipment the employee should be utilizing. The information presented on this label should be respected in the workplace and appropriate precautions taken.



The National Fire Protection Association's diamond shaped labeling provides information about a chemical's degree of hazard with regard to health (blue), flammability (red), and reactivity (yellow). The higher the number (0 -4), the more hazardous the chemical. NFPA Standard 704

Material Safety Data Sheet (MSDS): It is a requirement that a MSDS be provided in the workplace for all hazardous chemicals that are present. The MSDS should not be viewed as just a paperwork requirement but rather it should be appropriately viewed as a detailed source of information concerning the specific chemical. An MSDS contains information on the chemical's identity, physical and chemical characteristics, potential for fire, explosion and reactivity, health hazards, primary routes of entry, precautions for safe handling, appropriate protective equipment, emergency and first aid procedures, as well as other information.

The MSDS provides the most detailed information relating to safety that is readily available in the work place and is important information for first responders. It could be argued that the most important facet of a safety program is employee familiarity with the MSDS. The MSDS is not necessarily easy to read or understand. However, the information contained in the MSDSs will assist the employee in being aware of the level and nature of the hazard that the chemical presents, the appropriate protective equipment to use, the reactivity dangers in relation to other chemicals in the workplace, and the appropriate first aid procedures. Help in understanding the MSDS can be found at internet websites such as: http://web.princeton.edu/sites/ehs/msds/msds_explanation.htm .

Developing a Safety Program: Any water system that utilizes hazardous chemicals must have a formal safety program. The safety program must be designed to ensure compliance with applicable laws and regulations as well as provide the necessary training needed to ensure a safe workplace. The American Water Works Association provides tools which can be utilized in this effort. Although these tools must be purchased, the costs pale in significance when compared to the potential costs relating to an accident or injury in the workplace. These tools, which are ordered as two separate DVD's, are described at AWWA's web page:

The first DVD titled "Safety First: Process Safety Management" can be ordered at the web page: http://apps.awwa.org/ebusmain/OnlineStore/ProductDetail/tabid/55/Default.aspx?ProductID=7148 .

The second DVD titled "Safety First: Hazardous Spill Containment and Cleanup" can be ordered at: http://apps.awwa.org/ebusmain/OnlineStore/ProductDetail/tabid/55/Default.aspx?ProductID=22227 .

AWWA also provides on-line safety related training that can be obtained at a minimal cost through the AWWA eLearning program. The eLearning website can be found at: http://www.awwa.org/Conferences/learning.cfm?ItemNumber=3413&navItemNumber=1519 .

Included in the course offerings are "Introduction to Health and Safety, EL39" and "Industrial Hazards, EL35".♦

Chlorine gas release

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that each of the three totes contained bleach. Even though each tote was clearly labeled, the label on the HSF tote was facing the delivery trailer's wall and was not accessible for viewing. The water operator was present during the delivery, but also didn't verify the contents of each tote.

Both individuals assumed incorrectly that all three totes contained the bleach compound. Subsequently, the transfer pump suction line was placed into the tote containing HSF and approximately 15 gallons of HSF was pumped into the treatment plant's bulk container which contained about 150 gallons of 12% bleach.

Industrial bleach is a highly alkaline sodium hypochlorite solution with a pH of around 11 while HSF is a strong acid with a pH of less than 1.5. The combination of the undiluted compounds resulted in a quick chemical reaction that created heat and released the chlorine in the bleach, normally in the aqueous form as NaClO and NaCl, as a gas.

How could this incident have been prevented? Every water system should have written chemical handling standard operating procedures (SOP's) and these SOP's should be followed each time chemicals are being delivered, transported, or handled in any way.

The development of a proper chemical handling SOP will not be discussed here except for one aspect. Specifically, the water operator should be present when chemicals are being delivered; should verify that the ordered chemical is being delivered; and should monitor that the ordered chemical is the one being transferred into a bulk storage tank. Such a procedure would rule out taking the chemical supplier's word or verbal assurance of what is being delivered or transferred. No chemical should be introduced into a bulk storage tank without the water operator actually reading the label on the tank from which the chemical is being pumped. ♦

Bull Shoals Lake reaches record level

Heavy rainfall in north Arkansas and southern Missouri in April and May caused Bull Shoals Lake to reach a record level of 695.6 feet. The normal pool is elevation 654. The high lake level required the release of water through the dam's flood gates begining May and which continued into June. At one point releases through the flood gates and power generators exceeded 55,000 cubic feet per second, a record. It was one of only a few times since the dam was completed in 1951 that water had to be released through the flood gates. Bull Shoals Lake is one of four large U.S. Army Corps of Engineers flood control reservoirs on the White River or its tributaries. Besides Bull Shoals, the reservoirs include Beaver Lake, Table Rock Lake and Norfork Lake

P.J. Spaul with the Corp's Little Rock District said that without Bull Shoals and Norfork Lakes in Arkansas most of the downstream White River levees would have been overtopped, and Arkansas communities such as Jacksonport and Newport would have flooded. He said without Table Rock Lake in the Branson, MO area, the crest on the White River would have been an estimated 20 feet higher and would have inundated hundreds more homes and business. Paul also said that flows on the Black River, which empties into the White near Black Rock, AR would have been four times greater without Clearwater Lake, a flood control reservoir located in southeast Missouri.

WATER SYSTEM IMPROVEMENTS

DENNARD WATER: approximately 24,000 feet of new 2 and 3-inch water mains.
DYESS WATER: water treatment plant improvements including a 400 gpm aerator, a reaction tank, a 200 gpm duplex high service pumps, and replacement of approximately 12,000 feet of 6-inch and 4-inch line.
HATFIELD WATER: replace approximately 3,700 feet of 6-inch water.
JACKSONVILLE WATER: 3 MG Elevated Tank and 30,000 feet of 24-inch transmission line.
SIDNEY WATER: addition of a 200 gpm water supply well
MILLTOWN-WASHBURN WATER ASSOCIATION: 32,950 feet of 3 to 6-inch mains and a 100 gpm pump station.
WASHINGTON COUNTY WATER AUTHORITY: approximately 376,000 feet of 3-inch through 8-inch line, a 130 gpm pump station, and a 200,000 gallon elevated tank.

WATER OPERATOR LICENSE EXAMINATIONS

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

Listed below are the dates and locations of examination sessions as scheduled, as of June 1, 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
07/01/11	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	9:00 AM
07/01/11	West Fork	Wenzel Community Center, 222 Webber	9:00 AM
07/15/11	Nashville	Carter Day Center, 200 Nichols Drive	9:00 AM
07/15/11	Russellville	Tri-County Water, 5306 N Arkansas Ave	9:00 AM
07/22/11	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	9:00 AM
07/22/11	N Little Rock	CAW Maryland Complex, 1500 West Maryland Ave	9:00 AM
07/29/11	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	9:00 AM
08/12/11	Mtn. Home	Baxter Co OEM Training Facility, 170 Dillard Dr.	9:00 AM
08/26/11	Hot Springs	HS Transportation Depot, 100 Broadway Terrace	9:00 AM
08/26/11	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	9:00 AM
08/26/11	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	9:00 AM
09/09/11	West Fork	Wenzel Community Center, 222 Webber	9:00 AM
09/16/11	Camden	AR Environmental Training Academy, 100 Carr Road	9:00 AM
09/21/11	Hot Springs	ARWA Annual Conf, HS Convention Center	9:00 AM
09/23/11	N Little Rock	CAW Maryland Complex, 1500 West Maryland Ave	9:00 AM
09/30/11	El Dorado	Water Utility Operations Center, 300 S Madison Ave	9:00 AM
10/07/11	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	9:00 AM
10/21/11	Fayetteville	Fayetteville Operations Center, 2435 S Industrial Dr	9:00 AM
10/21/11	Jonesboro	Jonesboro CWL Operations Bldg, 105 W. Johnson	9:00 AM
11/04/11	Camden	AR Environmental Training Academy, 100 Carr Road	9:00 AM
11/04/11	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	9:00 AM
11/04/11	Mtn. Home	Baxter Co OEM Training Facility, 170 Dillard Dr.	9:00 AM
11/18/11	Bono	Bono Community Center, 100 Woodland Trail	9:00 AM
11/18/11	Nashville	Carter Day Center, 200 Nichols Drive	9:00 AM
12/02/11	Camden	AR Environmental Training Academy, 100 Carr Road	9:00 AM
12/02/11	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	9:00 AM
12/09/11	N Little Rock	CAW Maryland Complex, 1500 West Maryland Ave	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 .

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. ♦

News of Note

NATIONAL

* The EPA has launched a searchable website for Safe Drinking Water Act violations. The Enforcement and Compliance History Online (ECHO) database - www.epa-echo.gov/echo/# - can be queried by county, water system name, type of violation and other parameters. The website also contains links to online state data, if available, such as consumer confidence reports, system information and compliance reports.

* Analytical results submitted so far under the Unregulated Contaminant Monitoring Rule 2 show that the most commonly detected contaminant is N-nitrosodimethylamine (NDMA). The compound was detected in 27% of systems sampled; however, the detection levels are generally low. The information can be found at http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/data.cfm .

* A Government Accountability Office (GAO) study of the effect of the American Recovery and Reinvestment Act (ARRA) money on drinking water and wastewater projects concluded that the funds supported more than 3000 jobs in infrastructure nationwide. To date, about eighty percent of the funds have been used. The study's conclusion was based on a review of ARRA records in nine states. The report can be found at http://www.gao.gov/new.items/d11642t.pdf .

* The Department of Homeland Security in April did away with the color coded advisory system previously used for terrorist threats. In its place, the agency has substituted a two tiered system. An 'Imminent Threat Alert' warns of a credible, specific, and impending threat against the U.S.; and an 'Elevated Threat Alert' warns of a credible threat. Under the new guidelines, if an individual threat alert is issued, it will be for a specific time period and will expire at the end of that period. The previous warning system consisted of five color codes ranging from green (low threat) to red (severe threat).

REGIONAL

* A draft of the Oklahoma Comprehensive Water Plan predicts that the state will need to spend $87 billion over the next 50 years to meet drinking water needs. That amount is roughly 13 times the state's entire budget. The draft also identifies 12 'hot spots' in western Oklahoma where significant water supply challenges could develop within as little as 10 years. The draft has already drawn criticism from some political leaders because of it potential economic impact on water rich areas of the state and from Tribal leaders who contend they own water rights that supersede those of the state. Besides the obvious question of how to pay for such a large infrastructure need, the state must also decide if it has extra water beyond its own needs and whether water should be sold out of state; in particular, to Texas. The completed portions of the draft Plan can be viewed at the website for the Oklahoma Water Resources Board: www.owrb.ok.gov/

STATE

* Drinking water awards presented at the annual conference of the Arkansas Water Works and Water Environment Association in May included the following.

- Glen T. Kellogg Water & Wastewater Hall of Fame: Perry Nelson, Prescott.
– Water Works Manager of the Year: Bill Daniels, Pocahontas.
- Water Works Outstanding Achievement for Greater than 5000 Population: Ronnie Davis, Conway Corporation.
- Water Works Outstanding Achievement for Less than 5000 Population: Michael Mathis, Big Clifty Water.
- Best Tasting Water: Center Grove Water Users Association.

Over $16,000 was raised at the conference for the Water for People program.

* Results of the 2010 census for Arkansas showed that the state's population shifted to the northwest while losses in the Delta counties continued. Thirty-six of the state's 75 counties lost population and 39 gained. Monroe County in east Arkansas lost the most with a decline of 20.5 %, and Benton County in the northwest showed the highest gain with a population increase of 44.3%. Overall, the state's population increased by 9.1% between 2000 and 2010. Census data can be found at www.census.gov .

* State information technology officials released in May a redesign of the state's website, www.Arkansas.gov that includes a mobile version. Officials said the mobile version has two features not found on any other portal. The first, Text4help, allows a user to input a question about government services in the form of a text message and customer service staff will respond back in a text message with an answer. The second feature is an e-government services geolocation widget which returns search results based on the user's location. There is no charge for either of the mobile services.

ENGINEERING SECTION

Heather Parker-Foster has joined the Section as an Environmental Health Specialist. She will be working in the water licensing program primarily as a training coordinator. Heather has a B.S. in Biological Sciences from Mars Hill College in North Carolina, and previously worked as an environmental consultant for Department of Defense agencies. Her 16 years of environmental work also includes working at the Military Department of Arkansas as an environmental compliance manager and as an Environmental Specialist for the Engineering Section.

Major Monitoring, MCL, Treatment Technique, & Licensing Violations

Community & Nontransient Noncommunity Public Water Systems / January – March, 2011

ALICIA WATER	Bmon 1,2
ALICIA WATER	Dmon 1
BEEBE WATER	BMCL 2
BENTON CO WATER AUTHORITY #4	Bmon 2
BOYDELL WATER	BMCL 3
COTTON PLANT WATER	Bmon 1
COTTON PLANT WATER	BMCL 3
CRABAPPLE POINT WATER	OperLic 1,2
CROWLEY'S RIDGE WATER	GWRmon 2
DENNING WATER	Bmon 2
DIAMOND CITY WATER	Bmon 1
EAST NEWTON CO WATER	BMCL 1
EAST NEWTON CO WATER	Bmon 2
ENGLAND WATER	BMCL 3
FREEDOM WATER	Bmon 2
GILMORE WATER	Dmon 1
GILMORE WATER	OperLic 2, 3
GRANGE-CLAMINE WATER	Bmon 2
GREAT LAKES CHEMICAL WEST	BMCL 3
GREENWICH CENTER	Bmon 1
HOSANNA HEIGHTS WATER	Dmon 1
HOSANNA HEIGHTS WATER	GWRMCL 1,2,3
HOSANNA HEIGHTS WATER	OperLic 3
LAKE VIEW WATER	BMCL 3
LITTLE RIVER RDA	Bmon 1
LITTLE RIVER RDA	DMCL 1,2,3
MAMMOTH SPRING WATER	Dmon 2
MONTICELLO WATER	Bmon 1
MNTROSE WATER	BMCL 3
MORNING STAR WATER	FMCL 1,2,3
MOUNT SHERMAN WATER	RMCL 1,2,3
NORTH CARBON CITY WATER	BMCL 2
PORTLND WATER	BMCL 3
RIDGEFIELD ESTATES WATER	Bmon
RUSSELLVILLE IMP DISTRICT 2	Bmon 1
SDM WATER	FMCL 1,2,3
SDM WATER	RMCL 1,2,3
SOUTH MOUNTAIN WATER	RMCL 1,2,3
STAR CITY WATER	Bmon 2
SUBIACO ACADEMY WATER	DMCL 1,2,3
TALL OAKS MHP	IMCL 1,2,3
TURRELL WATER	OperLic 1
TURRELL WATER	Dmon 1
VANDERVOORT WATER	Bmon 3
WALDRON WATER	DMCL 1,2,3
WIEDERKEHR VILLAGE WATER	Bmon 2
YELLVILLE WATER	Bmon 3

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=October, 11=November, 12=December

Boozman co-sponsor of bill to provide SDWA relief for small systems

Senator John Boozman of Arkansas is a co-sponsor of proposed legislation introduced by Sen. James Inhofe of Oklahoma that would provide exemptions from EPA drinking water regulations for water systems less than 10,000 population. The Small System Safe Drinking Water Act of 2011 (S999) was introduced in May. The language of the bill prohibits EPA from taking any enforcement action against a system less than 10,000 population unless it can ensure that the system can pay for whatever corrective action would be required to return to compliance. Where that is not feasible, EPA would have to issue an exemption from rule compliance. The bill lists disinfection byproducts, arsenic, Stage 2, and Ground Water Rule as specific examples to which it would be applied.

The bill also proposes to amend the Safe Drinking Water Act to require that EPA set standards that are no more expensive to implement for small systems than for large systems, and authorizes $15 million per year in technical assistance and pilot programs.

Senator Inhofe has introduced similar legislation during each of the last several Congressional sessions without success. He has not expressed optimism as to S999's fate suggesting, rather, that the intention is to elevate the issue and help others become more aware of the compliance challenge facing small drinking water system.

Source: ASDWA Weekly Update

Mandatory Training Course Schedule

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

MANDATORY COURSE NAME	START DATE	END DATE	OPCERT GRANT ELIGIBLE COURSE	CITY	LOCATION All courses begin at 8 a.m.	SPONSOR
Advanced Water Treatment	07/01/11	07/15/11	Yes	Internet	http://www.sautech.edu/admin/escience.aspx	AETA
Basic Water Distribution	07/12/11	07/14/11	Yes	Russellville	Tri-County Water, 5306 N Arkansas Ave	AETA
Basic Water Treatment	07/12/11	07/14/11	Yes	Nashville	Carter Day Center, 200 Nichols Drive	ARWA
Advanced Water Distribution	07/15/11	07/30/11	Yes	Internet	http://www.sautech.edu/admin/escience.aspx	AETA
Intermediate Water Treatment	07/19/11	07/21/11	Yes	N Little Rock	CAW Maryland Complex, 1500 West Maryland Ave	AETA
Basic Water Distribution	07/19/11	07/21/11	Yes	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Advanced Water Distribution	07/26/11	07/28/11	Yes	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Basic Water Math	07/26/11	07/26/11	Yes	Paragould	Holiday Inn Express, 3502 Linwood Dr	AETA
Applied Water Math	07/27/11	07/27/11	Yes	Paragould	Holiday Inn Express, 3502 Linwood Dr	AETA
ADH Compliance	07/28/11	07/28/11	Yes	Paragould	Holiday Inn Express, 3502 Linwood Dr	ADH
Basic Water Math	08/01/11	08/01/11	Yes	Internet	http://www.sautech.edu/admin/escience.aspx	AETA
Basic Water Math	08/09/11	08/09/11	Yes	Fayetteville	Fayetteville Operations Center, 2435 S Industrial Dr	AETA
Intermediate Water Treatment	08/09/11	08/11/11	Yes	Mt. Home	Baxter Co OEM Training Facility, 170 Dillard Dr.	ARWA
Applied Water Math	08/10/11	08/10/11	Yes	Fayetteville	Fayetteville Operations Center, 2435 S Industrial Dr	AETA
ADH Compliance	08/11/11	08/11/11	Yes	Fayetteville	Fayetteville Operations Center, 2435 S Industrial Dr	ADH
Applied Water Math	08/15/11	08/31/11	Yes	Internet	http://www.sautech.edu/admin/escience.aspx	AETA
Basic Water Treatment	08/23/11	08/25/11	Yes	Hot Springs	HS Transportation Depot, 100 Broadway Terrace	AETA
Basic Water Treatment	08/23/11	08/25/11	Yes	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Intermediate Water Distribution	08/23/11	09/15/11	Yes	Ft. Smith	Fort Smith Utilities, 3900 Kelly Hwy	AETA
Advanced Water Distribution	08/23/11	08/25/11	Yes	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Basic Water Treatment	09/01/11	09/15/11	Yes	Internet	http://www.sautech.edu/admin/escience.aspx	AETA
Intermediate Water Distribution	09/06/11	09/08/11	Yes	West Fork	Wenzel Community Center, 222 Webber	ARWA
Intermediate Water Treatment	09/13/11	09/15/11	Yes	Camden	AR Environmental Training Academy, 100 Carr Road	AETA
Basic Water Math	09/13/11	09/13/11	Yes	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Applied Water Math	09/14/11	09/14/11	Yes	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Basic Water Distribution	09/15/11	09/30/11	Yes	Internet	http://www.sautech.edu/admin/escience.aspx	AETA
ADH Compliance	09/15/11	09/15/11	Yes	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ADH
Advanced Water Distribution	09/20/11	10/13/11	Yes	Ft. Smith	Fort Smith Utilities, 3900 Kelly Hwy	AETA
Advanced Water Treatment	09/20/11	09/22/11	Yes	N Little Rock	CAW Maryland Complex, 1500 West Maryland Ave	AETA
Basic Water Distribution	09/27/11	09/29/11	Yes	El Dorado	Water Utility Operations Center, 300 S Madison Ave	ARWA
Basic Water Math	09/27/11	09/27/11	Yes	Hot Springs	HS Transportation Depot, 100 Broadway Terrace	AETA
Applied Water Math	09/28/11	09/28/11	Yes	Hot Springs	HS Transportation Depot, 100 Broadway Terrace	AETA
ADH Compliance	09/29/11	09/29/11	Yes	Hot Springs	HS Transportation Depot, 100 Broadway Terrace	ADH
Intermediate Water Treatment	10/03/11	10/17/11	Yes	Internet	http://www.sautech.edu/admin/escience.aspx	AETA
Basic Water Treatment	10/04/11	10/06/11	Yes	Lonoke	ARWA Training Facility, 240 Dee Dee Ln	ARWA
Basic Water Math	10/11/11	10/11/11	Yes	Russellville	Tri-County Water, 5306 N Arkansas Ave	AETA
Applied Water Math	10/12/11	10/12/11	Yes	Russellville	Tri-County Water, 5306 N Arkansas Ave	AETA
ADH Compliance	10/13/11	10/13/11	Yes	Russellville	Tri-County Water, 5306 N Arkansas Ave	ADH
Intermediate Water Distribution	10/17/11	10/31/11	Yes	Internet	http://www.sautech.edu/admin/escience.aspx	AETA
Intermediate Water Distribution	10/18/11	10/20/11	Yes	Jonesboro	Jonesboro CWL Operations Building 105 W. Johnson	ARWA
Intermediate Water Distribution	10/18/11	10/20/11	Yes	Fayetteville	Fayetteville Operations Center, 2435 S Industrial Dr	AETA

*Opcert Grant Eligible Course – Meal and lodging expenses may be reimbursed for operators from Community or Non-Transient Non Community Public Water System serving a population of 3300 or less. All courses require pre-registration. The course sponsor must be contacted to register for each course and to confirm course information that is subject to change or cancellation. .

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

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

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

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

Water Operator Licenses Issued

February 1, 2011 through April 30, 2011

Licensee Name	Grade/Type	System Name
ARTHUR ROBERT	T - IV	ADH ENGINEERING SECTION
ASHLEY JIMMY	T - I	BENTON WATERWORKS
AVERY RAYMOND	D - IV & T - IV	BEAVER WATER DISTRICT
BELKNAP RAY	T - II	VISKASE CORPORATION
BERNDT KENNETH	D - I	EUREKA SPRINGS WATERWORKS
BLAIR JIMMIE	T - III	MARSHALL WATERWORKS
BURSON DAVID	D - II	MAYFLOWER WATERWORKS
COLDIRON JONATHAN	D - II	ARSENAL WATER SYSTEM
COTE ANDRE	D - I	CITY CORPORATION
CRITTENDEN LOUIE	D - I	EL DORADO WATERWORKS
FRAIZE ERIC	D - III	HWY 71 WATER DISTRICT #1 PWA
HENDERSON GERALD	D - II	ARK ST PARK-QUEEN WILHELMENA
HIDROGO GONZALO	D - IV & T - IV	BEAVER WATER DISTRICT
JAMES ARTHUR		WILMOT WATERWORKS
JAMES ARTHUR	D - I & T - I	WILMOT WATERWORKS
JONES ANDREW	D - I	EL DORADO WATERWORKS
KEELING ROY	D - IV	CLINTON WATERWORKS
KING BRADY	D - IV	BRYANT WATERWORKS
LILES DARRELL	D - III	BATESVILLE WATER UTILITIES & PFEIFFER WATER AUTHORITY
LOVE KENNETH	D - III	CENTRAL ARKANSAS WATER
MADDON TOMMY	T - IV	HOT SPRINGS UTILITIES
MILAM ROY	T - I	MARION COUNTY REG WATER DIST
MITCHELL ROBERT	D - VSS	RUSSELLVILLE- RWPSID2INC
MOORE GREGORY	D - IV	KIMZEY REGIONAL WATER DISTRICT
PARKER ROBERT	D - II	SMACKOVER WATERWORKS
ROBERTS DOUGLAS	D - I	GEORGIA PACIFIC PAPER MILL
ROBERTSON WILLIAM	D - IV	WATSON WATERWORKS
ROBINSON DARRELL	T - I	NOT PROVIDE
RUFFINS GARY	D - I	STEPHENS WATERWORKS
SALLEE MATTHEW	D - III	FAYETTEVILLE WATERWORKS
SCHLINKER JOHN	D - I	BOONEVILLE WATERWORKS
SCHULTZ BRYAN	D - I	BOONEVILLE WATERWORKS
STANFORD CHARLES	T - I	CALICO ROCK WATERWORKS
TAYLOR REAGAN	D - II	BRYANT WATERWORKS
TRUE DEVIN	T - II	US AIR FORCE BASE LITTLE ROCK
WADLEY DARRELL	D - II	LAMAR WATERWORKS
WALKER JEREMY	D - II	EAST LAKE WATER USERS ASSN & MOUNTAINBURG WATER AND SEWER
WALKER RAYMOND	D - I	HOXIE WATER DEPARTMENT
WEST BENJAMIN	D - III	CENTRAL ARKANSAS WATER
WEST CHARLES	D - I	MAGAZINE WATERWORKS
WEST ROBERT	D - IV & T - IV	NOT PROVIDE
WHITE KAREN	T - IV	CENTRAL ARKANSAS WATER
WHITTLE DANN	D - VSS	RAMBO RIVIERA SD WATERWORKS
WIDENER WENDY	T - I	NOT PROVIDE
WILKINS CLARENCE	T - III	WYNNE WATERWORKS
WILTGEN KURTIS	D - II	PEA RIDGE WATERWORKS

The need for routine valve maintenance

Dennis Taylor, P.E., Engineer Supervisor

Many public water systems in Arkansas appear somewhat reluctant to initiate a valve maintenance program. Reasons cited include perceived costs, additional labor requirements, the amount of resulting work that may be created, or maybe because they don't want to chance breaking the stem on a valve that hasn't been exercised in years, or perhaps never. Does that sound familiar?

These are very real concerns, but concerns that are far outweighed by the benefits of a scheduled valve maintenance program, starting first with your critical valves**.**

What is a "critical valve"?

Simply put, a critical valve is any water valve that the utility decides absolutely, positively has to work in an emergency situation. Does your water utility have any of those? Are they written down somewhere, or have you even thought about it? But perhaps more importantly, are you confident that your critical valves will work if an emergency happened right now? Utilities are few and far between that never have a main break, never have to replace a pump, never extend a main, never add a pump station, or never has to isolate a section of their distribution system.

A critical valve may only affect a small section of the piping network if it closes, but would impact a much wider area if it failed to close and additional valves in a much wider area had to be shut instead. Selecting these valves requires a thorough understanding of the risk involved (probability and consequence) should the valve fail to shut. "Probability" means the quantifiable likelihood that a valve will or will not fail based upon experience such as valve testing, and "consequence" can be quantified in terms of the numbers of properties (meters or customers) that would be either disconnected or experience unacceptable service such as fluctuating, low or temporarily negative pressure.

Reasons for a valve failing to close could include: the valve is not exercised regularly (and therefore "seized" as a result); the valve is inaccessible (e.g., valve in a busy street or covered by vegetation); or the valve is unsuitable for manual operation (large valve with no motor operator).

By identifying critical valves, water utilities can effectively evaluate and prioritize expenditures on solutions, such as scheduled maintenance, replacement, relocation, or SCADA control.

What are the "benefits"?

The benefits of a valve exercise program include:

1. ensuring your valve records are detailed and up-to-date;
2. ensuring valve reliability in an emergency;
3. ensuring the ability to isolate main breaks, resulting in lower water losses and minimal disruption of water service to customers;
4. extended valve life;
5. less time to make emergency repairs; and
6. reducing the number of broken, inoperable, or "lost" valves that could result in large direct and indirect costs such as increased equipment and labor required to complete repairs, and consequential damages to utility customers.

What exactly is a valve exercise program?

The answer to that question varies depending on who you ask. But there are generally four agreed-upon components to an effective valve exercise program:

1. Locate your valves;
2. Fully exercise your valves;
3. Maintain detailed valve records; and
4. Schedule and perform any needed repairs.

Appendix A.6 - Inspection and Maintenance of AWWA C500-09 – *Standard for Metal Seated Gate Valves for Water Supply Service* states, in part, "Each valve should be operated through a full cycle and returned to its normal position on a schedule that is designed to prevent a build-up of turberculation (rust formation in pipes as a result of corrosion) or other deposits that could render the valve inoperable or prevent a tight shutoff… . The number of turns required to complete the valve operation cycle should be recorded

EPA photo

and compared with permanent installation records to ensure that full travel is maintained."

The standard continues, "A record-keeping system should be implemented to document valve location, condition, maintenance and inspections of each valve… . If the stem action is tight from buildup on the stem threads, then repeat until opening and closing operation is smooth and free. A full inspection should be performed and any problems reported for repairs."

The AWWA standard concludes, "To carry out a meaningful valve inspection and maintenance program, it is important that at a minimum the location, make, type, size, turns, close direction, and installation date of each valve be documented and retrievable for future use.

Absent information from the manufacturer, it's been the author's experience that the number of turns to fully open/close a gate valve can be estimated by 3 x DIAMETER + 3. For example, a 6-inch gate valve would require approximately 21 turns (3 times 6, plus 3).

How do I get started?

A major stumbling block for most utilities seems to be the misconception that a valve exercise program has to be large in scope. In reality, it is better to have a modest, manageable beginning, so as to achieve immediate positive result. This is why the ADH recommends starting with identifying and then exercising your critical valves first. The eventual goal is to expand the program to include exercising all your valves over some time period (preferably not exceeding two years), if at all possible.

With advancements in tooling and proper training, a well-planned valve exercise program will yield positive results; and good planning and execution will minimize negative results. These facts are contrary to the view seemingly held by some water utilities that a valve exercise program will cause more work and trouble than it is worth. This is simply not the case because the majority of most negative results can be attributed to the very lack of a valve exercise program in the past. Once problems are identified, repairs can be budgeted and scheduled. The need to repair an inoperable critical valve is better identified and corrected in advance, rather than it be discovered in the middle of the night, and failure further complicates why the valve was needed in the first place. Being reluctant to exercise a critical valve for fear of breaking a stem or other concern is all-the-more reason to test its operation before an emergency actually happens.

Considering workforce availability and time, one option for a water utility is to utilize outside resources such as the Arkansas Rural Water Association to assist in this effort. Another possibility is to simply contract out your valve exercise program. When first considering a valve exercise program, hiring a contractor may your best and most cost-effective solution for several reasons: you can hire trained work crews whose specialty is valve exercising; they already have the proper equipment to ensure a professional job; and observing their work could be an excellent learning experience for your in-house personnel.

It's better late than never, to start.

Most water utilities have experienced trouble that could have been avoided had a valve exercise and maintenance program been in place. And sadly, most of these troubles likely resulted in costs that exceeded that of having a valve testing and replacement program in place.

The bottom line is every water utility should give serious consideration to implementing a proactive valve exercise program to ensure the ability of the system to respond effectively in case of an emergency. And remember, you can always call on your ADH District Engineer for help as a technical resource. ♦

Water license renewals due

All Arkansas licensed water operators and water operators in training should have received their renewal invoices in late May. The invoice, your training record - including which water system(s), if any, you wish your license to be associated with, and your renewal fee(s) should be submitted as soon as your renewal training is completed. You will need 24 contact hours of approved training, 12 of the hours must be approved as direct water operator training. The other 12 can be additional direct training or indirect training. Some of your renewal training may be documented on the internet at: http://www.healthyarkansas.com/eng/opcert/oper.htm

Not all approved training is shown on the website. To receive credit for training not shown, it should be manually added to your report. Only training attendance reported to the water licensing program in a suitable digital spreadsheet is added to the website. It is the responsibility of the training provider to report attendance in digital format.

If additional renewal hours more hours are needed, you have several options for obtaining the needed hours. This internet site can assist you in finding renewal training: http://www.healthy.arkansas.gov/eng/autoupdates/oper/opcertlinks.htm.

There is a 90 day grace period after a license expires to complete the renewal process. Training can be attended after the expiration date, June 30, 2011, to complete renewal training requirements. A renewal penalty is assessed on July 31, 2011 and licenses expired for more than one year can not be reinstated.

It is an operator's responsibility to see that his / her licenses are renewed regardless of the receipt of a renewal invoice or whether the renewal is processed by their utility, and to ensure that renewal documents are submitted to the ADH licensing program. Operators need to verify that their license has been renewed by watching for the receipt of their renewal wallet card from the ADH.

REPORT OF THE

Arkansas Drinking Water Advisory and Operator Licensing Committee

A. Martin Nutt, Training and Certification Officer

The quarterly meeting of the Arkansas Drinking Water Advisory and Operator Licensing Committee was held on April in Lonoke. Committee members present were: Steve Di Cicco, Committee Chair, Benton Water Utilities; Matthew Dunn, P.E., Crist Engineers, Inc.; Susan Merideth, P.E., Jonesboro City Water and Light; Terry House, Grand Prairie Bayou Two PFB; Scott Borman, Benton Washington RPWA; and Robert Hart, P.E., Executive Secretary, Arkansas Department of Health (ADH). Absent was Findlay Edwards, P.E., University of Arkansas.

Others in attendance were Martin Nutt, ADH Training and Certification Officer; Ida Hampton, ADH Administrative Specialist; Randy Harper, Arkansas Environmental Training Academy; Jeremy Rowe and Gary Oden, SAU Tech; Dennis Sternberg, Arkansas Rural Water Association; and Heath Vaughan, Community Resources Group.

Minutes from the Committee's October 13, 2010 meeting were approved. No meeting was held in January, 2011 due to inclement weather.

Standing Business

The Committee had no High School Waiver requests to consider.

Nutt reported on a meeting held at the Arkansas Natural Resource Commission to discuss uses for the SDWA OpCert Training Grant and possible replacement funds when the grant expires at the end of calendar year 2012. Attending the meeting in addition to Nutt were Mark Bennett with ANRC; Dr. Corbet Lamkin, SAU Tech; Harper; and Sternberg. Nutt indicated the group identified no new uses or sources of future funding were identified. He briefly reviewed for the Committee the present spending levels under the grant and discussed how funds could be used for mobile training trailers but not permanent facilities.

Hart stated the Legislative Task Force on Water Quality concluded its work in November, 2010 with several generic recommendations. The most significant was a recommendation that the State Water Plan be updated to address both water quantity and quality issues in the state. Hart was not sure which of the recommendations, if any, would see legislative action.

Old Business

The Committee received an update from the High School Waiver Workgroup it formed at its October 2010 meeting. Workgroup members consisted of Chair Dunn, Merideth, and Nutt. Dunn reported that the workgroup reviewed the Arkansas water operator licensing law and regulations which state that the "Committee may determine that an applicant's experience or relevant training can be substituted for the requisite high school diploma". The workgroup agreed the Committee in the recent past had not focused on what experience or training was being substituted to obtain the waiver.

Research by the workgroup on other states' regulations found that only Arkansas and Montana allowed the waiver of a high school diploma or the GED equivalent. Historical data on Arkansas waivers showed 42 requests were received since the inception of the waiver in 2002, and all were approved. Of those, only 36% of the individuals currently hold active licenses.

Dunn reiterated the workgroup's primary concern that the Committee review only the applicant's experience and training when considering a waiver. The workgroup recommended that the letter currently required from the applicant as part of the waiver request be replaced by a questionnaire which would list specific information about the applicant's experience or training that is to considered as a substitute for the high school diploma. The Committee reviewed a draft questionnaire form and, after a minor addition, approved it.

Dunn said the final workgroup recommendation was for the Committee to consider removal of the waiver language in the next regulation change. The Committee discussed what effect removing the waiver language might have on small systems' ability to comply with licensing requirements. Borman suggested the Committee consider the recommendation and to next address its removal or to modify its language to be more restrictive when future regulation changes are considered. The Committee concurred with Borman's recommendation.

The Committee received reports from Merideth and Nutt concerning their attendance at the Association of Boards of Certification's Annual Conference. Merideth noted the impressive degree of effort ABC, Professional Testing, Inc (ABC's contract psychometrics firm) and the Validation & Examination Council Committees utilize to ensure that exams represent the industry, are equitable and are legally defendable. She noted the conference program's emphasis on tools to improve quality and effectiveness of certification training. She also noted the examples of partnerships between certification programs and community colleges in regards to apprenticeship programs, as well as high school recruitment programs and online continuing education efforts. Those included the ABC Continuing Education Review Service, British Columbia's Online Training Registry, and the University of Illinois' SmallWaterSupply.org.

Nutt gave his summary of the conference and reemphasized several of the subjects Merideth mentioned in her report. He said he would like to investigate the use of OpCert funds to purchase improved technology for all OpCert funded trainers.

Nutt advised the Committee that the new license exams developed in the fall of 2010 had been implemented, and the 2011 training calendar and exam schedule had been finalized and published in late October 2010

New Business

Nutt updated the group on the Board of Health's upcoming 2011 appointment of a new Committee member. Two nominees had been received: Mr. Timothy Shaw, General Manager of Community Water System, in Greers Ferry and Mr. David Jurgens, P.E., Utilities Director, City of Fayetteville, in Fayetteville, Arkansas. The Board of Health was to address the appointment at its April 2011 meeting. (See adjacent article.)

Hart provided a review of several pieces of legislation by the 2011 General Assembly that could affect public water systems. Those included partial funding for the start of an update to the State Water Plan; a new law that allows the Natural Resources Commission to place water and wastewater systems into receivership; and the continued waiver of certain public water system records from the state's Freedom of Information Act. From the ADH perspective, the most significant legislation was Act 197 which requires a fluoridation program for any public water system serving a total of 5,000 or more persons. Compliance with the Act is contingent on funding outside of the water system's tax or rate revenue being available to pay for start up costs.

Nutt presented to the Committee a report to be provided to the Arkansas Water Works and Water Environment Association at its annual business meeting during its Annual Conference in May 2011. The report provides general information on the number and types of licenses held by operators, the make-up of the Licensing Committee, and enforcement actions taken against water systems. The Committee concurred with the report's content.

Shaw appointed to Water License Committee

At its April meeting in Little Rock, the State Board of Health appointed Timothy Shaw, General Manager of Community Water System to the Arkansas Drinking Water Advisory and Operator Licensing Committee for a six year term. Shaw brings to the Committee a strong background in the water industry and will be a valued member of the Committee.

Nominations for the appointment were requested from the: Arkansas Water and Wastewater Managers Association, Arkansas Rural Water Association, Arkansas Water Works and Water Environment Association, and the Arkansas Environmental Training Academy Advisory Board. Mr. David Jurgens, P.E., Utilities Director, City of Fayetteville, in Fayetteville, Arkansas was also nominated.

The Committee at its April 2011 meeting thanked outgoing member Steve Di Cicco from Benton for his term of loyal service to the Committee. Di Cicco served as the Committee Chair during his last year of service.

The Committee advises the Department of Health and its Engineering Section on matters affecting public water systems and the administration of the Water Operator Licensing Program.

Committee Reports

In his Section Director's report, Hart provided a budget update, noting that FY 2012 budget remained flat, that possible federal budget cuts could affect the Sections budget significantly in future fiscal years, and that future monitoring and analytical costs for disinfection by-products and other compounds could significantly affect the budget. He also noted significant turnover in Environmental Health Specialist positions due to unfortunate changes in the state pay plan that has a similar position at ADEQ at a higher grade level. He concluded with a description of the EPA Drinking Water Infrastructure Survey was in progress, and the significant reduction in the number of disinfection byproduct violations that the program had seen over the last couple years. He credited that to the hard work by smaller water systems in addressing the issue and the technical assistance provided by Engineering Section to those systems.

Nutt, in his Training & Certification Officer's Report, called the Committee members attention to a spreadsheet handout summarizing the pass/fail rates for water licensing exams. Nutt stated the applications and exams were being turned around in a timely manner and that the exam passage rates remained about the same. He advised the Committee that the recent changes to the exam questions could adversely affect passage rates and concluded by noting that the ADH's scheduled Compliance Courses were being taught in spite of the program Training Coordinator position being vacant and that efforts to refill the position were currently underway.

Harper and Rowe provided the Environmental Training Academy's Training Report. Harper noted that their budget for fiscal year 2012 would be flat and that they had hired Jay Northern as their Backflow Training Coordinator Instructor. Rowe provided water training attendance data for the last six months with 24 classes held with 274 students.

Sternburg provided the Arkansas Rural Water Association's report and said that since January, 2011 ARWA had provided 10 water classes with a total of 210 students.

No other business was brought before the Committee, the next meeting date was set for July 13. Steve Di Cicco was presented a plaque his six years of service to the Committee, the Engineering Section and the licensed water operator community. ♦

ENGINEERING SECTION
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www.HealthyArkansas.com/eng/

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AWW&WEA District Meetings

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

DATE	TIME	CITY	LOCATION	SPONSOR
July 2011				
7	5:00PM	Jacksonville	Community Center	Central District, AWW&WEA
7	6:00 PM	Subiaco	Subiaco Abbey	Western District, AWW&WEA
13	9:00AM	Pea Ridge	Emergency Services Building	Northwest District, AWW&WEA
14	5:00PM	Russellville	Western Sizzlin	AR Valley District, AWW&WEA
14	5:00PM	Batesville	Caldwell Family Restaurant	North Central District, AWW&WEA
14	5:30PM	Marvell	Fire Training Building	Eastern District, AWW&WEA
21	12:30pM	Paragould	Couch's Bar-B-Q	Northeast District, AWW&WEA
28	6:00PM	El Dorado	Water Utility Meeting Room	Southwest District, AWW&WEA
August 2011				
4	5:00PM	Little Rock	Little Maumelle Wastewater Plant	Central District, AWW&WEA
4	6:30PM	Fort Smith	Golden Corral	Western District, AWW&WEA
10	9:00AM	Siloam Springs	110 N. Mount Olive Street	Northwest District, AWW&WEA
11	5:00PM	Russellville	Western Sizzlin	AR Valley District, AWW&WEA
11	5:00PM	Batesville	Caldwell Family Restaurant	North Central District, AWW&WEA
11	5:30PM	Des Arc	Dondie's Riverboat Restaurant	Eastern District, AWW&WEA
17	6:30PM	Watson Chapel	Camp Taloha Girl Scout Camp	Southeast District, AWW&WEA
18	12:30PM	Jonesboro	Western Sizzlin	Northeast District, AWW&WEA
25	6:00PM	Texarkana	The Ole Feed House	Southwest District, AWW&WEA
September 2011				
1	5:00PM	Conway	1st Church of the Nazarene	Central District, AWW&WEA
1	6:30PM	Fort Smith	Golden Corral	Western District, AWW&WEA
8	5:30PM	Helena	Wild Hog Saloon	Eastern District, AWW&WEA
8	5:00PM	Russellville	Western Sizzlin	AR Valley District, AWW&WEA
8	5:00PM	Batesville	Caldwell Family Restaurant	North Central District, AWW&WEA
14	9:00AM	Springdale	The Jones Center	Northwest District, AWW&WEA
15	12:30PM	Paragould	Grecian's Steak House	Northeast District, AWW&WEA
21	6:30PM	Monticello	Q & Y House	Southeast District, AWW&WEA
22	6:00PM	Camden	Charles O. Ross Center	Southwest District, AWW&WEA
October 2011				
6	5:00PM	to be announced	to be announced	Central District, AWW&WEA
6	6:30PM	Fort Smith	Golden Corral	Western District, AWW&WEA
12	9:00AM	Eureka Springs	Best Western Inn of the Ozarks	Northwest District, AWW&WEA
13	5:30PM	West Memphis	Water Office	Eastern District, AWW&WEA
13	5:00PM	Russellville	Western Sizzlin	AR Valley District, AWW&WEA
13	5:00PM	Batesville	Caldwell Family Restaurant	North Central District, AWW&WEA
19	6:30PM	Star City	FUMC Family Life Center	Southeast District, AWW&WEA
20	12:30PM	Paragould	PLWC Service Center Building	Northeast District, AWW&WEA
27	6:00PM	Magnolia	The Ole Feed House	Southwest District, AWW&WEA

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