Aqua Talk

A newsletter from the Safe Drinking Water Program

Colorado Department of Public Health and Environment

WQCD Initial Flood Response Efforts

Volume 8, Issue 1
Winter 2014

By Amy Zimmerman, Engineering Section

Heavy and persistent rain the week of Sept. 9, 2013 caused major flooding of Colorado streams and rivers beginning Sept. 11. Upon receiving reports of flooding, the Water Quality Control Division's initial concern was to help protect public health by determining the scope of the flood impact and assist public drinking water and wastewater facilities in addressing immediate threats to operations and/or infrastructure.

Division personnel initially developed a list of 747 potentially impacted drinking water and wastewater facilities located near watersheds experiencing heavy rains and/or flooding. On Sept. 13, division personnel began contacting facility operators who had not already contacted the division. The goal was to contact every facility that may have needed assistance, these outreach efforts were extended though the following week. Of 747 facilities indentified, the division reached 345 facilities, another 210 were determined to be outside the flood impact areas. Significant operational impacts and/or infrastructure damage were reported by 28 facilities and 48 reported their facility had been stressed in some way.

The division worked closely with operators of stressed and damaged facilities. The immediate response efforts were focused on protecting public health and aiding in recovery. The division coordinated with public water systems in issuing 13 boil water notices to ensure delivery of safe drinking water until the immediate threat could be addressed. For wastewater, efforts were focused on recovery. During the flooding, collection systems and treatment plants became overwhelmed due to huge quantities of inflow and infiltration. To aid in

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Design Criteria Grandfathering Clarification

By Tyson Ingles, Engineering Section

The first sentence in section I.1.6 of the *Design Criteria for Potable Water Systems* (2013 edition) may mislead some water systems that recently have been identified as public water systems. The sentence reads as follows: Waterworks installed and in operation prior to Oct. 1, 1999 do not need to apply for approval by the Department.

While in general the Water Quality Control Division intends to exempt waterworks installed prior to Oct. 1, 1999 from the approval process, this will not always be the case. The sentence primarily applied to existing, regulated public water systems with a history of sanitary surveys, sampling and interaction with the division. For systems in operation prior to Oct. 1, 1999 but have not been actively regulated by the division as a public water system, the division interprets the above sentence as follows:

TRANSIENT, NON-COMMUNITY GROUNDWATER SYSTEMS: Systems are grandfathered whether or not they were actively being regulated by the division. This assumes the regulated entity has an adequate chlorination system to provide a disinfectant residual and is able to maintain compliance with the total coliform rule and the nitrate/nitrite MCLs.

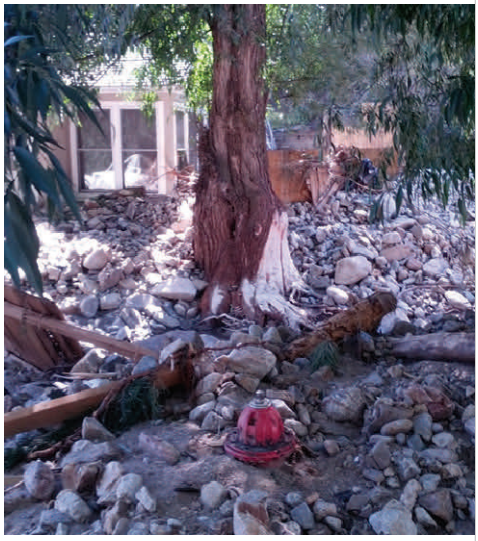
ALL SURFACE WATER, COMMUNITY GROUNDWATER, AND NON-TRANSIENT, NON-COMMUNITY GROUNDWATER SYSTEMS: Systems that are discovered under any of these classifications without a substantial compliance history (which shows a history of monitoring and compliance) will be required to submit for division approval of their source(s), treatment, storage and distribution systems per Article 1.11.2 of the *Colorado Primary Drinking Water Regulations*. ♦

Initial Flood Response

(Continued from page 1)

quick recovery, heavily impacted treatment plants isolated some bioreactor basins and allowed other basins to pass floodwaters through the plant. The isolated basins retained the plant's microbiology to enable a quicker recovery after flooding receded.

The division worked with personnel from federal agencies including FEMA, EPA and the Army Corps of Engineers . The division took a leadership role to coordinate 28 damage assessment site visits. Site visits were used to document damages, thus facilitating FEMA's efforts to designate counties eligible for federal FEMA aide. In all, FEMA designated 18 counties eligible for public assistance. In addition to aiding FEMA designations, site visits allowed the division to streamline design reviews for emergency repairs and temporary construction for emergency operations. The division is continuing to provide technical assistance to drinking water and wastewater facilities working to rebuild and/or recover after the flood. ♦



Regulation 11 Reorganized

By Ron Falco, Safe Drinking Water Program Manager

In December 2013, the Water Quality Control Commission approved revisions to the *Colorado Primary Drinking Water Regulations* to reorganize, simplify and clarify language without modifying regulatory requirements. The revisions become effective March 1, 2014.The regulations are now much easier to understand and navigate but organized very different. Please take some time to get familiar with them. They are available on the Water Quality Control Commission web page at www.colorado.gov/cdphe/wqcc.

In January we will begin regulatory development and stakeholder efforts to adopt the federal revised total coliform rule. This rule applies to all public drinking water systems in Colorado and the changes will be significant. Additionally, we also will tackle a number of issues that have been under consideration for some time including:

- Items related to the Alamosa waterborne disease outbreak investigation report
- Storage tanks
- Cross connection control
- Water haulers
- Numerically defining *detectable* disinfectant residual in the distribution system

We look forward to working with stakeholders to adopt the revised total coliform rule to address these additional issues using common sense approaches that will enhance public health protection in Colorado. Beginning in January, stakeholder meetings will be held around the state. Workgroups will be used as needed to address major elements. The stakeholder process will provide opportunities to participate and provide comment in person and over the internet. The regulatory proposal is due to the Water Quality Control Commission by August 2014; the new federal language must be adopted by January 2015.

The effective dates for many of the newly adopted elements will not come until 2016 or later, so look for training opportunities in the future regarding these changes. I hope you get an opportunity to participate and assist with this effort. As always, we appreciate the partnership we have with public drinking water systems in making sure that Coloradans always have safe drinking water.

Thank you.

Reduction of Lead in Drinking Water Act: New Definition of Lead Free

By Melissa Swerdlow, Regulatory Development and Support Unit

The Reduction of Lead in Drinking Water Act became effective Jan. 1, 2014 and amends the Safe Drinking Water act to:

- Lower the maximum lead content of wetted surfaces of plumbing products such as pipes, pipe fittings, plumbing fittings and fixtures from 8.0 percent to a weighted average of 0.25 percent;
- Establish a statutory method for the calculation of lead content; and
- Eliminate the requirement that lead-free products be in compliance with voluntary standards established in accordance with SDWA 1417(e) for leaching of lead from new plumbing fittings and fixtures.

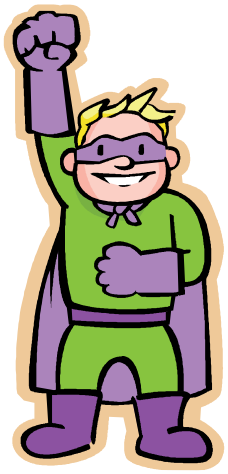
Additionally, the act has established that the following products are exempt from meeting these criteria:

- Pipes, pipe fittings, plumbing fittings or fixtures, including backflow preventers used exclusively for non-potable services such as manufacturing, industrial processing, irrigation, outdoor watering, or any other use where water is not anticipated to be used for human consumption.
- Toilets, bidets, urinals, fill valves, flushometer valves, tub fillers, shower valves, service saddles or water distribution main gate valves that are two inches in diameter or larger.
- The allowance of 0.2 percent lead when used with solder and flux has not changed. The act also maintains that it is unlawful to introduce into commerce any products that do not meet the lead-free definition. NSF is currently certifying products that meet these requirements. For more information about NSF product certification, visit http://www.nsf.org/services/by-industry/water-wastewater/plumbing-fixtures/lead-content-compliance.

While the act does not require that all current pipes, fittings and fixtures meet the new definition of lead free, any of these parts that are repaired or replaced after Jan. 1, 2014 must meet the new definition. More information is provided in *Summary of the Reduction of Lead in Drinking Water Act and Frequently Asked Questions* document published by the EPA.

Ask Aqua Man

Dear Aqua Man,



I've heard there are new regulations coming this year. What is that all about and how will that affect me?

Sincerely,

Reggie U. Lator

Dear Mr. Lator,

On March 1, 2014 a new version of the *Colorado Primary Drinking Water Regulations* will become effective. Over the last year and half the regulations have been rewritten in order to make them easier to understand and navigate, clarify existing requirements and remove outdated requirements. To do this we reorganized each rule into its own section, organized the content and maintained a common structure for each rule, and used descriptive and consistent titles for each section.

There have been no changes to the requirements of the regulations. Sampling requirements, sampling frequencies, MCLs, and treatment techniques have remained the same. We hope these changes will make it easier for you to locate and understand the requirements relevant to your system so compliance can be more easily achieved and violations can be avoided when possible. To access the new regulations, visit http://www.colorado.gov/cdphe/wqcc and click on *Current Commission Regulations*.

Sincerely,

Aqua Man

Policy 3: GWUDI Determination

By Tyson Ingles, Engineering Section

The Colorado Department of Public Health and Environment with industry and university experts conducted stakeholder work throughout 2010 and 2011 to develop and finalize a policy on determining groundwater under the direct influence (GWUDI) of surface water. Policy DW-003, *Determination of Groundwater Under the Direct Influence (GWUDI) of Surface Water*, was finalized March 23, 2012.

The *Colorado Primary Drinking Water Regulations* refer to GWUDI both in the definitions section of the regulation and in Article 7, surface water treatment rules. Once a groundwater source has been determined to be GWUDI, the public water system must install an approved filtration technology and treat the water to achieve: 3.0 log removal and inactivation of *Giardia lamblia*, 4.0 log removal and inactivation of viruses, and 2.0 log removal of *Cryptosporidium.* Alternatively, the requirements for groundwater sources are much less onerous. The system must disinfect the source, usually with free chlorine, and maintain a chemical disinfectant residual of 0.2 mg/L at the entry point to the distribution system. In other words, being reclassified as GWUDI has major financial and operational ramifications to a public water system. Policy 3 was developed for the division to be transparent, fair, scientifically accurate, and consistent throughout the state in determining which sources are groundwater and which sources are GWUDI.

Policy 3 asserts that for a water source to be considered groundwater, there must exist a 50-day time of travel from surface water (or surface influence) to the groundwater being collected. To determine this, a water system can do hydraulic modeling or collect data. There are three steps in determining if a water system's source is GWUDI:

1. Initial screening
2. Data collection
3. Evaluation

If the initial screening shows the source is likely groundwater, then the system will remain groundwater. If the source fails the initial screening, the division will have the groundwater evaluation specialist investigate whether additional data needs to be collected by the public water system. Data includes temperature, conductivity, total coliform, aerobic spores and microscopic particulate analyses (MPA - usually 3). If a system elects to NOT perform data collection, the division will act to protect public health and reclassify the water system to GWUDI. The division has made available coaching resources to aid in the data collection piece. To request coaching please visit www.colorado.gov/cdphe/dwtraining.com

Once data is collected, the division analyzes whether or not the source should be considered GWUDI. Only about 20 percent of the sources collecting data actually get classified as GWUDI. The division always recommends that a water system proceed with data collection. If you have any questions about how the division performs certain analyses or the status of your system, please contact Bryan Pickle at 303-692-3527. ♦

MPA Schedule Change

By Tyson Ingels, Engineering Section

The division's Compliance Assurance Section will be changing the schedule for all surface water systems collecting microscopic particulate analysis (MPAs) this year. The division is attempting to assess trending year-to-year and therefore adjusting requirements when requesting MPAs to be performed. Systems should check their sampling schedule for more information at http://wqcdcompliance.com. ♦

Log Inactivation and Baffle Factors for Small System Designs

By Doug Camrud, Engineering Section

Part 2 of 2

The Water Quality Control Division of the Colorado Department of Public Health and Environment evaluates disinfection log inactivation as part of drinking water design reviews including substantial treatment modifications, sanitary surveys and source water classification changes. The division uses the new *Colorado Design Criteria for Potable Water Systems*, which went into effect Sept. 1, 2013, along with the *Colorado Primary Drinking Water Regulations*, as the basis for reviewing waterworks at public drinking water systems.

Preliminary Summary of Guidance Document

System Type	Tested flow rate (gpm)	Baffle factor
Pipe Loop Systems (minimum length to diameter ratio of 160 to 1 is required for a pipe. If pipe loop used each segment must be 40:1)	1-140	1
Pressurized Tanks in Series (1 to 6 tanks)	5-30	0.1-0.55
Non-pressurized Vertical Plastic Tanks	5-40	0.1-0.2
Unbaffled and Baffled Open Surface Horizontal Concrete Tanks	5-40	0.1-0.5
Inlet Manifolds	5-50	0.1-0.5
Packing Materials	5-50	0.1-0.6

As reported in the fall 2013 issue of *Aqua Talk*, the division contracted with Colorado State University to construct tank configurations commonly used for small systems, perform empirical tests to determine baffling factors over a range of flow rates, and assist in the development of a small system baffling factor guidance document. The guidance document is being finalized to address overall contact basin baffling factor issues for small systems and provide disinfection contact-basin design guidance and contact basin baffling factor determinations. Additionally, the guidance document will provide information on basin geometry, inlet and outlet design (such as, location and size), intra basin baffling and modifications that can improve new or an existing contact basin design (such as adding packing materials or an inlet manifold). The above table provides a preliminary summary of the contact system type, tested operational flow rates and the range of baffling factors associated with tested conditions that will be further discussed in the guidance document. ♦

Examples of random packing material

Example of a pipe loop contactor

Stage 2 Sample Site Plans

By Bryan Pilson, Compliance Assurance Section

Stage 2 disinfectant and disinfection byproduct rule began Oct. 1 for all community and non-transient water systems serving less than 10,000 people that chemically disinfect water or receive chemically disinfected water. Many of these smaller systems are on annual monitoring and will not have to collect their first Stage 2 sample for total trihalomethanes (TTHM) and five haloacetic acids (HAA5) until later in 2014.

All water systems are required to develop a Stage 2 sampling site plan. When you review your 2014 monitoring schedule at the beginning of the year, you may see a Stage 2 schedule requiring samples at *high DBP site–undefined–contact WQCD*. This means a Stage 2 sample site plan for your system identifying the site name or address of your Stage 2 sample sites has not been received by the division. A Stage 2 sample site plan template is available online at http://goo.gl/1doxR. Please fill it out and submit it to the division so that we have a record of your sample locations. Without a Stage 2 sample site plan, the system will not be eligible for reduced monitoring. Many systems that were on reduced monitoring under Stage 1 may qualify for immediate reduced monitoring under Stage 2 and may not have to monitor until 2015 or 2016. Submitting this one page sample site plan may save you hundreds of dollars!

The most important information on the Stage 2 sample site plan is defining the system's peak disinfection byproduct (DBP) formation month and the sample site locations. All water systems are required to monitor their peak DBP formation month. Each system may have a different peak DBP formation month. Factors that increase DBPs include high water temperature, high water age in the distribution system, and increased organic material in the source water. Most systems probably have their highest water temperature in August, and therefore will choose August as their peak DBP formation month. Schools might not be in session in August, so they may choose September as their peak DBP formation month.

Have your sample sites from Stage 1 changed under Stage 2? Under Stage 1, systems were required to monitor at the locations in their system with the oldest water or maximum residence time (max res). Under Stage 2, water systems are required to monitor at their highest TTHM and HAA5 sites. Unless you have additional information or a special circumstance, your highest TTHM and HAA5 sites are at your maximum residence time site likely sampled under Stage 1. Finally, include a simple drawing or map showing your sample locations in your system.

Congratulations, you've completed your Stage 2 sample site plan! Send it to the division and check your monitoring schedule in a few weeks to see if the sample location has updated on your Stage 2 TTHM and HAA5 schedule. ♦

Learn Now or Forever Hold Your Peace

By Armando Herald, Local Assistance Unit

Public water system personnel are strongly encouraged to take advantage of upcoming training opportunities before it is too late! For more information please Google *Colorado drinking water system training opportunities* or visit: www.colorado.gov/cdphe/wqtraining.com

The Safe Drinking Water Program (SDWP) of the Colorado Department of Public Health and Environment supports training for water professionals in Colorado so they can strengthen their ability to supply safe drinking water to the public. In 2009 and 2010, studies were conducted by the SDWP to identify the most common failures at Colorado public water systems, determine gaps in available training services and establish high priority training goals. The public water system training grants program was designed to use existing surplus federal drinking water revolving funds to help fill gaps identified through these studies by enhancing and expanding the provision of training services to small public water systems.

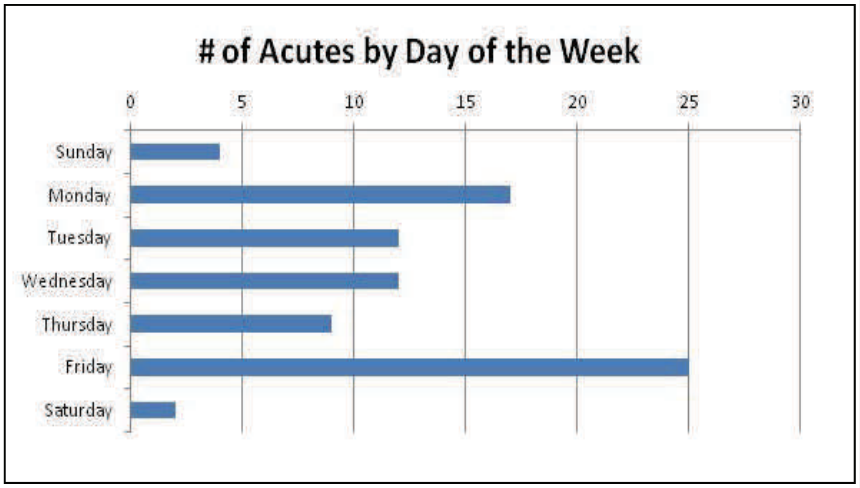
(Continued on page 12)

Portrait of Waterborne Disease Outbreak

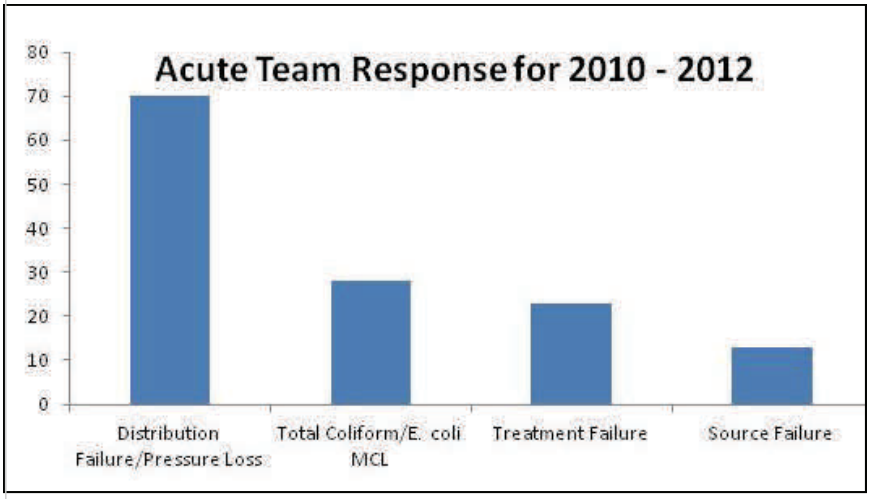
Oh no . . . It's Fecal Friday!

By David Dani, Local Assistance Unit

Alert! Alert! It's Friday afternoon and an outlaw in the shape of *E. coli* has broken through our drinking water system barriers. He was first spotted yesterday with another confirmed spotting today. We know he's hiding out at the far ends of our distribution system piping. Is he alone or are there others in his gang hiding with him? There will be no outbreak on my watch! It's time to call for reinforcements. It's time to call the acute team. It's also time to call and cancel this afternoon's haircut appointment.



The safe drinking water acute team, whether it's Friday night, the weekend or a holiday, is always ready to spring into action if there is the possibility for people to get sick. The acute team will work with you to evaluate the situation, assess the risk to public health and determine the appropriate response. They work closely with engineering, compliance, epidemiology, local health agencies, and emergency preparedness and response during the coordinated response. On average, the acute team responds to one event per week. Contact the acute team and report a potentially acute drinking water incident by calling the toll-free 24-hour environmental release/incident report line at 1-877-518-5608. ♦



Responding to an acute situation:

1. Notify the health department and conduct public notification (typically hand delivery) within 24 hours.
2. Increase the chlorine level in the distribution system (between 2 and 4 mg/L) and flush the lines.
3. Collect total coliform samples and report results to the health department.

For more waterborne disease outbreak information please visit the Colorado Department of Public Health and Environment website and search for *public health threats*.

Drawn by Tiffany Jackson

Coach's Corner

Standard Operating Procedures

By Mike Bacon, Local Assistance Unit

Whether you have been in the field for one year or 30, it is my belief and experience that standard operating procedures (SOPs) are an important tool to help increase the effectiveness and efficiency of your system by ensuring tasks are done consistently by everyone. SOPs save money, reduce violations/ deficiencies and can be important when working with safety issues. A great example of tasks that should be done consistently is collecting water samples for analysis, such as: lead and copper, chlorine residuals, TTHM/HAA5, SOCs, VOCs, IOCs, nitrates, MPA and yes, even total coliform sampling.

Each system is different and might have different testing equipment. Not every system uses a color wheel, digital meter or a spectrophotometer for testing chlorine. Calibrating the equipment or zeroing the meter might be different, yet being consistent in collecting a representative sample, having a clean vial or non scratched vial, having the correct reagent and sample size is part of the SOP for collecting a chlorine sample. An SOP outlines each step to be done the same way by everyone.

SOPs are written for a number of jobs or procedures, such as filling a chemical solution tank, starting up or shutting down a system, flushing hydrants, exercising valves, responding to emergencies repairing water lines, routine walkthroughs or routine checks, calibrating equipment and so on. The main parts of an SOP include:

1. Title or topic of the SOP
2. The date the SOP was written or revised
3. The background or the purpose behind the SOP
4. The procedure or steps to follow

Anybody involved in the job or procedure can write an SOP. It is good practice to involve the people performing the task when writing the SOP. SOPs can be a training tool for new staff as well. How detailed you make the SOP is up to you. It should be written so anyone can follow and consistently perform the task the same way each time.

Do you have written SOPs? What other SOPs do you need? ♦

Fall Drinking Water Quiz Answers

1. Which of the following can cause taste and odor problems? Hydrogen sulfide
2. Chlorine will kill bacteria most rapidly at what pH? 6.5
3. The greatest source of error when determining water quality is improper? Sampling
4. When should a water sample be analyzed for chlorine residual? Immediately
5. What two parameters are the primary causes of water hardness? Calcium and magnesium
6. Which parameter is not a disinfection-by-product? Coliform
7. Chlorine will kill bacteria most rapidly at what temperature? 60 degrees Fahrenheit
8. How many pounds of chlorine are needed to dose 50 mg/L into a new 12-inch water line that is 1703 feet long? 4.17

Drinking Water Quiz

By Jackie Whelan, Local Assistance Unit

Think you know everything about drinking water? Prove your drinking water knowledge with our quiz. Complete all four 2014 drinking water quizzes online and you'll be entered in a drawing to receive *AWWA Water Operator Field Guide*, valued over $50. The drawing will be held in January 2015. Go to *http://fs8.formsite.com/cohealth/form370/index.html* to record your answers. Answers will appear in the next issue. The fall 2013 quiz answers are on page 11. Some questions have more than one correct answer, select all that apply.

1. Who is legally responsible for ensuring monitoring samples are taken, submitted to the lab and reported to the state?
   - A. Operator in responsible charge (ORC)
   - B. Administrative contact
   - C. Owner of the drinking water system
   - D. Utilities manager or superintendent
2. Who can take monitoring samples?
   - A. Personnel not certified at the level of the facility
   - B. Owner of the water system
   - C. Only the ORC
   - D. Anyone assigned under the supervision of the ORC
3. The administrative contact receives all billing, compliance and enforcement notices from the division. This person is the:
   - A. Legal contact designated by the owner of the water system
   - B. Owner of the water system
   - C. Operator in responsible charge
   - D. Utilities manager or superintendent
4. The owner of the drinking water system is required to notify the division of the name and contact information of the operator in responsible charge.

   True

   False
5. Who may make process control and/or system integrity decisions in a water facility?
   - A. Operator in responsible charge
   - B. Operator certified at or above the classification of the water facility
   - C. Owner of the drinking water system
   - D. Any trained operator working in the facility
6. I have a two year grace period after my certificate expires to renew.

   True

   False
7. The day after my certificate expires:
   - A. My certificate is invalid and I am no longer a certified operator
   - B. If I'm an ORC, I've caused my employer(s) to be in violation of Reg100
   - C. I have two years to restore the certificate by completing the renewal process before I have to re-take the exam
   - D. I must pay an additional $50 late fee when I apply to renew my certificate
8. If an operator's certificate has been expired for more than two years, it is automatically revoked. To re-certify the operator must:
   - A. Submit a completed application for renewal
   - B. Submit an application to take the entry level exam
   - C. Submit an application to take the exam at their previous level
   - D. Cannot be re-certified

Simple Fixes: Tank Inspection and Recommendation Follow-up

By Christine Lukasik, Field Services Section

The most commonly cited tank deficiencies are storage condition, inadequate air vent conditions, and tank or hatch corrosion. The Water Quality Control Division recommends *routine* and *annual* tank inspections which includes a National Association of Corrosion Engineers certified inspector performing an inspection using American Water Works Association D101-53 standards. Knowing tank conditions could prevent costly maintenance, significant deficiencies/violations that could compromise public health and safety, and unforeseen/unexpected surprises. Taking action on tank inspection findings is as critical as performing the tank inspection.

How do you keep on top of it all? Create *routine* operations and maintenance system checklists. Suggested checklist items:

- Review past tank inspection reports
- *Schedule and perform necessary maintenance*
- Check for an intact air vent and 24-mesh non-corrodible air vent screen
- Determine if the tank has a water tight seal
- Determine the tank hatch gasket or seal, closures and lock conditions
- Determine signs of corrosion on/in the tank, hatch, ladder and other mechanisms. If corrosion increased since the last inspection, and/or if the lining or paint is pitted, peeling or flaking determine if maintenance work is needed.
- Check the tank drain and overflow 24-mesh non -corrodible screen or flapper valve and drain or overflow site conditions
- Survey the exterior of the tank for dimples, dings, dents, buckling, ice, water, staining, graffiti, paint loss and condition of any outside ladder
- Survey the scene for overall security and evidence of trespassers
- Survey the foundation/tank area for vegetation and pooling of water/snow/ice
- Determine tank age and life cycle given its current condition

If you do not follow-up, your tank could implode!

Your findings could prompt commensurate resolution/actions which may be a simple repair or include budgeting, scheduling and replacement. So, if you have trouble sleeping at night over tank inspections and want to know more, read the *Design Criteria for Potable Water Systems* (pages 94-102) for tank design expectations, have a conversation with your local state representatives/ inspectors and owner/ boards/decision makers to determine elements that need attention and priority. ♦

Water Fluoridation and Children's Oral Health

By Tyson Ingles, Engineering Section

Colorado's governor has designated children's oral health as one of the state's 10 winnable battles over the next five years. The 10 winnable battles are public health and environmental priorities that have known effective strategies to improve public health and the environment for Coloradans. For the last 55 years, water fluoridation has been a public health measure proven to be safe, economical and effective in protecting teeth from dental decay. Currently, about 70 percent of Colorado residents on public water systems drink water that is optimal in fluoride. The winnable battle associated with fluoridation is to increase this rate to 75 percent.

While oral diseases are significant themselves, their relationship to overall general health often is overlooked. Oral disease may unnecessarily impact a child's performance in school, speech development, nutrition, self -esteem and sleep. Community water fluoridation is a cost effective program to help reduce dental decay. The Oral Health Unit works on programs to improve the oral health of Coloradans.

A major role for the Oral Health Unit is to inform the public of fluoride levels in community water systems throughout Colorado. The unit also promotes and monitors new fluoridation systems. The fluoridation specialist works to promote, maintain, monitor and ensure safe, effective operations of existing public water fluoridation systems. In cooperation with the Oral Health Unit, the Safe Drinking Water program has assigned key staff to assist with the technical aspects of the oral health/water fluoridation program. The Safe Drinking Water Program will perform inspections at systems that adjust fluoride levels and also will provide outreach for systems interested in fluoridating their water. If you are interested in water fluoridation, please contact the Safe Drinking Water Program's fluoridation engineer Clayton Moores at 719-545-4650 (x105) or clayton.moores@state.co.us or the Oral Health Unit directly at 303-692-2470 or cdphe.psdrequests@state.co.us. ♦

Learn Now

(Continued from page 7)

Through the public water system training grants program, the department has awarded funding for training projects that promote improved technical, managerial and financial capacity for public water systems in Colorado with a preference given to training projects serving operators and owners of small public water systems in rural Colorado. In the 2012 grant program, approximately $100,000 of federal drinking water revolving funds were awarded to fund four projects of 12 months in duration. In the 2013 grant program, approximately $200,000 was awarded to fund nine projects of 18 months in duration. The duration of the training projects in 2013 was intentionally increased to provide more opportunities for public water system personnel to fit training into their busy schedules.

The federal drinking water revolving fund surplus that was utilized to fund the public water system training grants program has been used up; therefore, 2013 is the final year of the public water system training grants program for the foreseeable future.

There is still time take advantage of these training opportunities and the SDWP strongly encourages public water system personnel to look for upcoming training opportunities starting now and until June 30, 2014.

Recognizing high quality public water system training is still a high priority, the Local Assistance Unit will continue to work with its partners to develop new and cost effective training opportunities for public water systems now and in the future. ♦

Coming Down the Pipe...

Colorado Regulatory Initiatives

By Julie Kreyche, Regulatory Development and Support Unit

The Environmental Protection Agency promulgated the revised total coliform rule (RTCR) in February 2013. The Safe Drinking Water Program will adopt the revised total coliform rule in order to maintain primary enforcement authority of the *Colorado Primary Drinking Water Regulations*. Primacy agencies must adopt the provisions of the RTCR no later than February 2015 and those provisions become effective March 1, 2016. The program recognizes the opportunity rulemakings bring to address additional issues with the regulations and wishes to capitalize on the opportunity the RTCR rulemaking will bring.

Since the RTCR affects all public water systems in the state, the entire regulated community will be asked to participate as stakeholders. As a result, the program has the opportunity to make revisions to improve other rules and add other provisions not currently covered by the regulations. The program plans to address storage tanks, water haulers, distribution system residual and cross-connections.

The division will begin the stakeholder process for this rulemaking in January 2014. These meetings will present the concepts of the provisions to be included in this rulemaking.

All interested stakeholders are welcome to attend and provide input on the proposed revisions. For those unable to attend in-person, webinar and conference calling services will be available. For more information about this rulemaking and the stakeholder meetings please visit www.colorado.gov/cdphe/wqcd, click on *What's New* and sign up for our list serve. ♦

Updating Regulation No. 52, Drinking Water Revolving Fund

By Mike Beck, Grants and Loans Unit

This fall Grants and Loans Unit initiated a rule change to Regulation no. 52, the drinking water revolving fund (DWRF) to more holistically review and rank projects through a new prioritization model. These changes align with Regulation no. 51, the water pollution control revolving fund (WPCRF) rule changes. Similar to the changes in the WPCRF, DWRF changes aim to provide a balance between addressing health and compliance related projects, while improving the transparency and administration of the DWRF.

Stakeholder meetings were held in September and October on the proposed prioritization model. Despite low attendance, positive feedback was received and was valuable in the development of the final draft submitted to the Water Quality Control Commission. Proposed changes included removal of the current ranking criteria from the regulation and instead include it in the annual intended use plan (IUP); elimination of category rankings 1 through 5 and replacement with new criteria that use a more balanced approach for determining project priority and updated the definitions.

Mesa Water and Sanitation District

The division submitted the proposed regulation changes to the Water Quality Control Commission in November to initiate the rulemaking hearing process. The hearing is expected to take place at the April 2014 commission meeting. Please visit www.colorado.gov/cdphe/wqcc to learn more about the rule change and WQCC process. If you have any questions please contact the Grants and Loans Unit at CDPHE_grantsandloans@state.co.us ♦

Facility Operator Certification

By Jackie Whelan, Facility Operator Program

OCPO: The Water and Wastewater Facility Operators Certification Board (WWFOCB) contracts with a nonprofit group made up of volunteers who are subject matter experts to administer the certification process. A management company handles the day-to-day operations. Together they are the Operator Certification Program Office (OCPO).

The Water and Wastewater Facility Operators Certification requirements, Regulation 100, is the regulation governing the certification requirements. Passing the appropriate level exam is required for certification. Exams are taken sequentially starting at level D treatment or level 1 collection/distribution. Exams are offered three times each year.

The deadlines to submit applications to take the exams are March 1, July 1 and Nov. 1. There are multiple exam dates and locations in each exam cycle. For an additional charge electronic testing at OCPO also is available. Information regarding certification exams is available by contacting the OCPO at 303-394-8994 or www.ocpoweb.com.

Applications, fees, submission deadlines and other exam information are available through OCPO. Colorado specific need-to-know study topics are also listed on their website.

Training: Basic training is available at no charge by downloading *Operator Basics* located at Montana University System Center. Completing this training course often is sufficient preparation to pass the entry level exams, both water and wastewater. Additional training is available from many sources. Board approved courses can be found on OCPO's website.

Each certification is good for three years. There are requirements for professional development to be completed within the three year period. Many training opportunities offered by the division and professional organizations are free (or with a minimal charge) to facilitate the on-going education requirements for certified operators. A list of board approved courses for training units is available on OCPO's website.

Additional information is also available on the division's website at www.colorado.gov/cdphe/wqcd under *Services* click on *Facility Operator Certification*.

WWFOCB: The board meets six times per year. The February meeting is held in conjunction with the Colorado Rural Water Conference in Colorado Springs on February 4 at 10 a.m. Other regularly scheduled meetings will be held in April, June, August, October, and November on the last Tuesday of the month at 9 a.m.

For more information contact Nancy Horan at 303-692-3463. Meeting agendas can be found online by going to the division's website at www.colorado.gov/cdphe/wqcd and clicking on *Boards/Commissions* at the top of the page.

ORC Changes: If you are the operator in responsible charge (ORC) of a system and are leaving that system, please notify the division in writing. Please include your name, the name of the system and PWSID number and the effective date of separation. If you are the owner of a system with a new ORC, please submit a contact update form to the division within 30 days of the change. Forms may be found at www.colorado.gov/cdphe/wqcd. ♦

Have some time saving helpful hints or tips to share with fellow operators? Can Aqua Man answer your question? Is there a topic you would like discussed? Contact Jacki Main by

- email: jacklyn.main@state.co.us
- phone: 303-692-3665
- fax: 303-782-0390
- mail: WQCD, 4300 Cherry Creek Drive South, Denver, CO 80247

National Drinking Water Week, May 4-10

By Chet Pauls, Safe Drinking Water Program

Consumers can be potent allies in our efforts to provide consistently safe drinking water. To fill this role, they must value safe drinking water and the endless efforts required of those that provide it.

National Drinking Water Week, May 4 – 10, provides an opportunity to highlight the efforts of national organizations like AWWA and EPA to inform consumers about how safe drinking water gets delivered to their taps. We are developing tools for public water systems to more easily communicate with their customers regarding:

- The value of safe drinking water
- Risks to safe drinking water prevented and mitigated by suppliers and regulators
- Role(s) of water professionals
- The consumer's role in ensuring safe drinking water

We are also developing a Governor's Proclamation to draw attention to drinking water week; making the *Value of Water* brochure available in a modifiable template; partnering with the Colorado Foundation for Water Education to develop a print article; and with the value of water work group to develop information to be delivered by other media.

We will update progress during water utility council meetings and encourage water systems to start planning their 2014 water week participation now so we all derive the benefit of better informed consumers.

Visit Us on the Web

Follow safe drinking water program on Twitter!	twitter.com/CO_SafeWater
Water Quality Control Division home page	www.colorado.gov/cdphe/wqcd
Water operator training opportunities	www.colorado.gov/cdphe/dwtraining.com
Aqua Talk online	www.colorado.gov/cdphe/aquatalk.com
Inspection services	www.colorado.gov/cdphe/wqinspectionservices
Contact list for drinking water regulations	www.colorado.gov/cdphe/wqcd

Aqua Talk Newsletter Information

Editorial team: Ron Falco, Jacki Main, Mike Bacon, Doug Camrud, Armando Herald, Kelly Jacques, Corrina Quintana, Jennifer Miller and Jackie Whelan.

We welcome comments, questions, story ideas, articles and photographs submitted for publication. Please address correspondence to Jacki Main, Aqua Talk Newsletter, Water Quality Control Division, 4300 Cherry Creek Dr. S., B2, Denver, CO 80246,1530 or email comments.wqcd@state.co.us. Enter *Safe Drinking Water Newsletter* as the subject. Past issues are available by contacting the editor or visiting the website at: www.colorado.gov/cdphe/aquatalk.com

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of Public Health
and Environment

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Division Internet address at www.colorado.gov/cdphe/wqcd

Winter 2014

Editor: Jacki Main

Purpose: To communicate division drinking water-related issues to stakeholders in a fun and informative format.