



# Aqua Talk

A newsletter from the Safe Drinking Water Program



Colorado Department  
of Public Health  
and Environment

## Partnering for compliance with the surface water treatment rule

Volume 8, Issue 3  
Summer 2014

by Bret Icenogle and Tyson Ingels, engineering section

The Water Quality Control Division and public water systems serving treated surface water to customers have shared the challenge of implementing the surface water treatment rule over the past 30 years. Over time, the treatment rule has included major and minor revisions driven by technology advancements, improved scientific knowledge, revised federal requirements and waterborne disease outbreaks. The division attempts to provide sufficient input and notice to stakeholders for regulation, policy and implementation changes. Recent stakeholder feedback indicates that the latest treatment rule and design criteria policy changes were not clearly communicated or understood. Additionally, the history of the rule has become cloudy further complicating the issue. The division hopes to help rectify the current situation by providing a brief history of the rule, discussing the recent regulatory and policy changes, recapping the treatment rule requirements and suggesting methods to evaluate compliance with the rule.

In the late 1970s, Colorado experienced an increase in waterborne disease outbreaks due to failures of surface water treatment systems. In response, the state implemented a surface water treatment rule requiring filtration and 30 minutes of chemical disinfection contact time. Without the consistency of modern turbidity instruments, the state required a once per year microscopic particulate analysis test of the raw and finished water at each surface water treatment plant to measure performance. If the surface water treatment plant provided a free chlorine residual of 0.2 mg/L and 30 minutes of chemical disinfection contact time prior to the first customer, the log inactivation level achieved by treatment plants was deemed satisfactory. In 1994, Colorado adopted the federal surface water treatment rule. The federal surface water treatment rule requires multiple treatment barriers and inactivation of pathogens based on a removal credit system plus disinfection. While the federal surface water treatment rule replaced the initial state rule, the division continued to support the use of MPAs and 30 minutes of chemical disinfection to demonstrate compliance.

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Message from the Safe Drinking Water program manager

# Roundtable discussions with the Water Utility Council

by Ron Falco, Safe Drinking Water program manager

Sometimes it may seem difficult to talk to a regulatory agency about an issue or concern at your drinking water facility even if it is just to ask a question. You may wonder if there would be increased scrutiny that could lead to trouble for you and your water system. Unfortunately, this can leave questions unanswered and represents a lost opportunity to work together to address the issue and learn. We understand this difficulty and have always been ready to discuss and help with matters of concern. At the June 2014 Colorado Water Utility Council meeting, the council proposed setting up roundtable discussions with Safe Drinking Water Program staff to discuss issues and ask questions in a non-threatening environment. Questions can be posed anonymously. I think this is a wonderful idea: We are planning to conduct the first roundtable discussion at the regularly scheduled council meeting on Oct. 3 at 10 a.m.

Depending on the level of interest and involvement, we will schedule these events on a regular basis. I hope you can join the conversation. Visit [www.rmsawwa.net](http://www.rmsawwa.net) for additional information. To contribute your question, please email Sherry Scaggiari, quality control laboratory supervisor with the City of Aurora at [sscaggia@auroragov.org](mailto:sscaggia@auroragov.org)

I also encourage joining the Colorado Water Utility Council and attending their monthly meetings which can be done by conference call. We have worthwhile discussions on a variety of issues. A standing item is for CDPHE to provide an update on our work and we always talk about the latest happenings in the Safe Drinking Water Program, regulatory issues, hot

topics and issues of concern and other items of interest. I also provide budget and financial status about once per quarter. Additionally, we will discuss any recent [CoWARN](#) activations or issues. Participating in these discussions will help you stay connected to a variety of interesting and relevant topics and activities.

Thank you!



Ron Falco, Safe Drinking Water Program Manager

# Surface water treatment rule

(Continued from page 1)

In the 2000s, the division began recognizing issues with past decisions regarding historical implementation of the treatment rule after promulgating EPA's long term 1 and long term 2 surface water treatment rules. To correct historic practices, the division launched a stakeholder processes to revise the [Design Criteria for Potable Water Systems](#) and develop [Surface Water Treatment Rule Performance Assessment, Proper Operation and Fostering Improved Operations](#) (policy 4). For a variety of reasons, both processes were very slow and final documents were not completed for several years.

In 2010, the division discontinued its use of MPAs and 30 minutes of chemical disinfection as the basis to meet the treatment rule with the adoption of policy 4. As policy 4 states, MPAs are only used to identify water treatment plants that may benefit from a more detailed or more immediate on-site evaluation of their treatment practices. The division relies on the EPA-developed tables related to treatment processes to establish removal credit for microbial contaminants and sanitary surveys to assess proper operation of the treatment systems in addition to routine monitoring. EPA developed removal credits for properly operated surface water treatment plants ranging from 2.0 to 3.0 log for *Giardia lamblia* and from 0.0 to 2.0 log removal for viruses based on

the type of treatment process in use. These values are summarized in Table 1.

The shift to the EPA table values appears to have the most impact for direct filtration treatment facilities. Prior to implementation, direct filtration facilities received a higher *Giardia lamblia* removal credit with a reduced inactivation requirement through disinfection. Following adoption of the treatment tables, direct filtration treatment facilities only receive a removal credit of 2.0 log for *Giardia* and must provide an additional 1.0 log of *Giardia* inactivation. This change often leads to direct filtration systems finding that their disinfection system cannot provide adequate treatment as originally constructed.

The [Colorado Primary Drinking Water Regulations](#) and the 2014 finalization of the *Baffle Factor Guidance Manual Determining Disinfection Capability and Baffling Factors for Various Types of Tanks at Small Public Water Systems* further contribute to the implementation of the treatment rule in Colorado. Entry point location is defined as being after all treatment occurs including disinfection contact time. The baffle factor guidance drastically reduces the previously accepted EPA-published baffling factors based on a five-year project with Colorado State University that included physical and computational fluid dynamic modeling of various configurations of chlorine contact

basins. The division uses baffle factor guidance to evaluate surface water treatment credits during sanitary surveys and design reviews for new or modified waterworks. Therefore, surface water treatment facilities originally thought to be in compliance with the treatment rule may now be reassessed by the division to

(Continued on page 4)

Treatment technology used	Total Giardia treatment required	Giardia removal credit (log)	Giardia inactivation required (log)	Total virus* treatment required	Virus removal credit (log)	Virus inactivation required (log)
Bag or cartridge filters	3.0	2.5	0.5	4.0	0.0	4.0
Conventional filtration	3.0	2.5	0.5	4.0	2.0	2.0
Direct Filtration	3.0	2.0	1.0	4.0	1.0	3.0
Membrane treatment	3.0	3.0	0.0	4.0	0.0	4.0

**Table 1 Removal credits for common Colorado surface water treatment plants**

\*Plants required to meet Giardia disinfection that accomplish it with free chlorine automatically achieve virus disinfection (Giardia disinfection requires much higher chlorine residuals and contact times than viruses).

# Surface water treatment rule

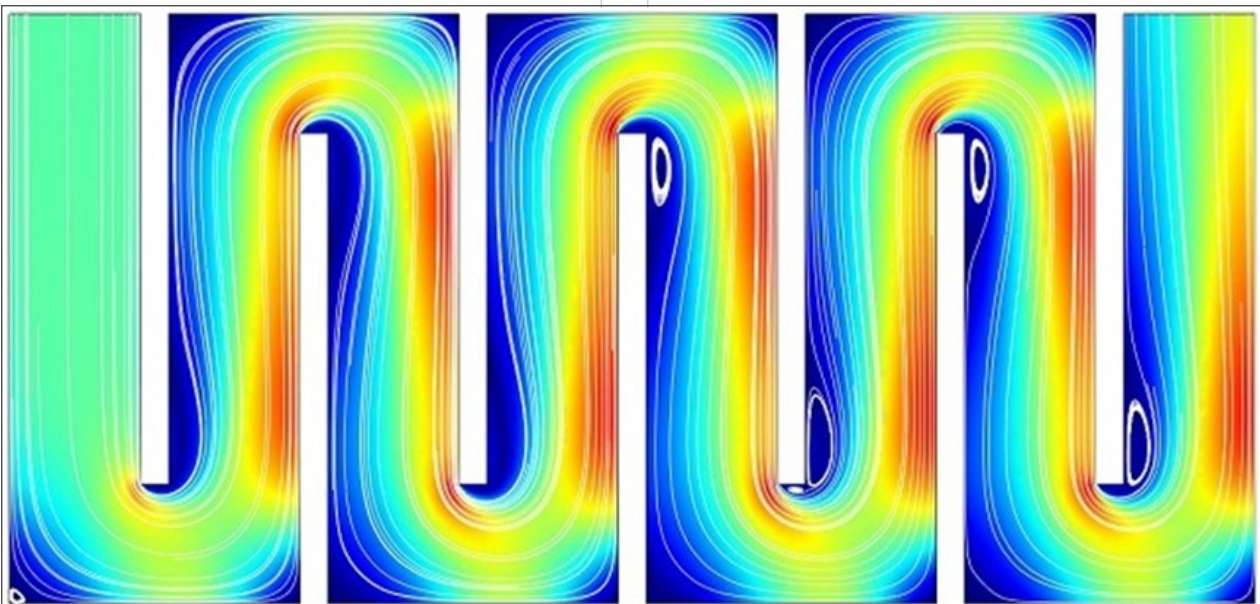
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determine compliance. Systems will be given the opportunity to work proactively with the division to come to an adequate solution to any potential issues. In certain cases, the system may need to change its operational practices, or possibly perform construction to adequately disinfect the water. The division is committed to helping public water systems throughout this process.

Based on the results of sanitary surveys performed over the past few years, the division recommends that all public water systems reassess surface water treatment removal credits and disinfection efficacy for each facility. During the next 18 months, the division will be contacting you to arrange an on-site visit to verify your log inactivation and treatment credits through a

demonstrate disinfection of pathogens.

- ◆ Request assistance from the [engineering section](#) if you are unsure of how to evaluate surface water treatment plant against the treatment rule.
- ◆ [Request](#) technical assistance as required. Seek aid and assistance of peers and similar public water systems.
- ◆ Consult an appropriate engineer to assess the degree of change necessary to achieve appropriate disinfection.
- ◆ As needed, consult with the division to determine the type of design submittal necessary for any system changes.
- ◆ Keep records of the actual log inactivation of both *Giardia* and viruses achieved by surface



Baffled tank flow path

special project titled: Disinfection Outreach and Verification Effort (DOVE).

Prior to being contacted by the division, if a public water system needs assistance evaluating its surface water treatment plants or determines that one or more of its surface water treatment plants does not provide adequate treatment per the treatment rule, the division recommends one or more of the following:

- ◆ Inform the division if a surface water treatment system is unable to adequately

water plants on a daily basis.

- ◆ Construct/install and properly operate water treatment to achieve the required disinfection after receiving approval by the division.

As always, the division is available to assist water systems as they perform self-assessments. Please contact the division's lead drinking water engineer, Tyson Ingels, for specific assistance with any disinfection related issues. Mr. Ingels can be reached by telephone at 303-692-3002 or by email at [tyson.ingels@state.co.us](mailto:tyson.ingels@state.co.us).

# State revolving fund update

by Mike Beck, grants and loans unit

Since the spring issue of Aqua Talk we've learned more about the waiver process for the American Iron and Steel (AIS) requirement passed by Congress Jan. 17, 2014. The statute permits the EPA to issue waivers for a case or category of cases where EPA finds:

1. that applying these requirements would be inconsistent with the public interest;
2. iron and steel products are not produced in the U.S. in sufficient and reasonably available quantities and of satisfactory quality; or
3. inclusion of iron and steel products produced in the U.S. will increase the cost of the overall project by more than 25 percent.

States are allowed, on behalf of the borrower, to apply for waivers of the iron and steel requirement directly to EPA headquarters. After receiving a completed application for a waiver, the EPA will publish the waiver request and all material submitted with the application on their website for 15 days. During that period, the public will have the opportunity to review the request and provide informal comment. The state revolving fund iron and steel products requirement pertains to construction, alteration, maintenance or repair. Projects with loan execution and/or plans and specification approval on or after Jan. 17, 2014 and prior to Oct. 1, 2014 are subject to the AIS requirement. ♦

## Pueblo employees move to new offices

The Colorado Department of Public Health and Environment's 14 Pueblo-based employees have moved to offices in the Historic Arkansas Riverwalk. The new office space puts all the employees in the same location. Prior to the move, the department leased office space in two Pueblo locations. Seven water quality staff members, two from disease control and five from health facilities, work in the Pueblo office.

The new main phone number is 719-295-5060 and will provide options to contact individual staff members. The address is 140 Central Main, Suite 300, Pueblo, CO 81003. ♦



# Drinking water funding vulnerable to federal cuts

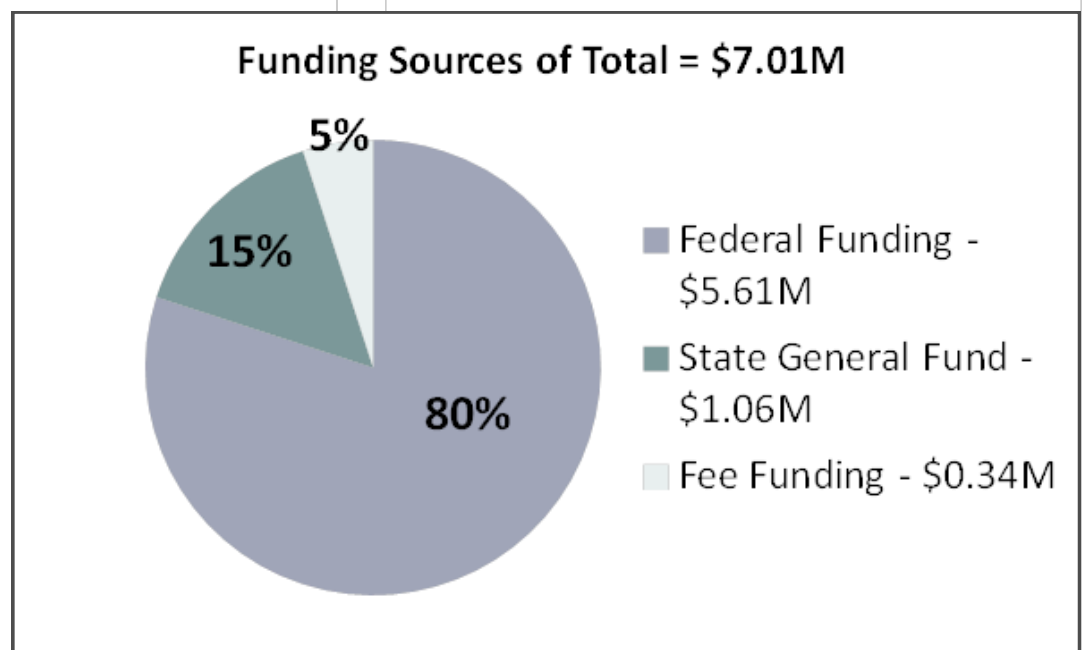
by Ron Falco, Safe Drinking Water program manager

The Safe Drinking Water Program is primarily funded by the federal government. This sounds like good news, but is a double-edged sword. The state receives great value by utilizing a variety of federal funding sources to protect public health in Colorado from threats to drinking water quality by implementing the Safe Drinking Water Act. However, this reliance on federal funding leaves the program vulnerable to federal funding cuts, and we have practically no voice in that process. For purposes of this discussion, we focus on personal services and operating cost in state fiscal year July 1, 2013 to June 30, 2014. This information is sufficient to illustrate the point. Figure 1 displays the funding split for the program. The state funding sources of general fund plus public water system fees combine for a total about \$1,400,000, which is about 20 percent of the overall program funding. The federal sources that comprise the remaining 80 percent of the program's funding consist of monies from our performance partnership grant with EPA (\$1,237,000) and from set-asides taken from the drinking water state revolving fund capitalization grant (\$4,415,000). Therefore, about 63 percent of the program's budget comes from the revolving fund set-asides. A future article will focus more on this set-aside funding.

The capitalization grant is potentially subject to significant cuts. Grant funding cuts have happened before. EPA's operator certification expense reimbursement grant established in early 2000s to assist operators with certification expenses and support state operator certification programs was terminated in 2007. EPA's drinking water security program grant established after Sept. 11, 2011 to help states establish WARN networks,

assist water systems with security and respond to security issues was terminated in 2012. The Safe Drinking Water Program has already had to absorb these federal funding cuts. We do not expect the capitalization grant to be terminated any time soon, but this grant has already been cut and further cuts have passed in the House of Representatives, but not been implemented. For example, in 2011 the set-aside funding for program was \$5,100,000 compared to \$4,800,000 in 2014.

With 80 percent of the program's funding coming from the federal government, and the lion's share of that tied to the capitalization grant set-asides, we are highly vulnerable to federal funding cuts. If such cuts come to fruition, it would be a great risk to the efficacy of the program. The state may be placed in a position to consider whether to increase state funding sources including general fund, fees or both, or curtail services. The goal of this article and future articles about funding is to help the regulated community understand the program's funding situation and be ready to knowledgeably engage in any funding discussions that we have with stakeholders in the future. The division's current stakeholder process involving fee funding is only for the Clean Water Program, as that is our most pressing current need.



# Written operating plans

by Jackie Whelan, facility operator program

The Water and Wastewater Facility Operators Certification Board held a rulemaking hearing on Aug. 26 to adopt changes to the *Water and Wastewater Facility Operators Certification Requirements, Regulation 100*. Regulation 100 requires all process control and facility integrity decisions be made by the certified operator in responsible charge. The board recognized that many water systems, especially small systems, don't have a certified operator in responsible charge or another operator certified at the level of the facility on-site at all times to make decisions and to oversee the routine tasks of plant management. In these cases, the certified operator in responsible charge may need to delegate many routine tasks or activities to other staff operators. These operators may or may not be certified.

Beginning Oct. 1, 2014, uncertified operators may be delegated routine tasks and activities if the limits of such tasks and activities are outlined in a written operating plan. These tasks or activities may be performed even if the certified operator in responsible charge is not on-site. The certified operator in responsible charge may delegate to another certified operator the authority to make operational decisions that are within the framework of a facility's operational plan. The operator in responsible charge, however, is accountable for the consequences of decisions made by subordinates within that framework. These decisions may be made even if the certified operator in responsible charge is not on-site.

The certified operator in responsible charge develops or participates in the development of the written operating plan. The operating plan must be very clear in defining the limits of such tasks, activities or decisions and the level of the operators that may perform them. Any operational activity beyond these limits requires the immediate and direct consultation with and participation of the certified operator in responsible charge or another operator certified at the level of the facility.

## Water System Operation and Maintenance Manual



This O&M Manual belongs to:

\_\_\_\_\_

PWSID#: \_\_\_\_\_

Completed by: \_\_\_\_\_

Date: \_\_\_\_\_

A clear, written operating plan ensuring everyone understands their roles and responsibilities within the facility for the day-to-day operation and maintenance of the treatment plant or distribution system. Contract operators should ensure that the development of a written operating plan is part of their contract.

The operating plan does not have to be a stand-alone document. Rather, it is recommended that the operating plan be incorporated into the facility's operations and maintenance manuals and part of the system's training plan. For more information about developing your operating plan visit [www.colorado.gov/cdphe/dwtraining.com](http://www.colorado.gov/cdphe/dwtraining.com). For assistance with the development of an O&M manual contact the local assistance unit's drinking water coaches at 303-692-3665 or [cdpewqdwtraining@state.co.us](mailto:cdpewqdwtraining@state.co.us).

# Simple fixes: Raw water sample taps

by Cameron Wilkins, PE, field services section

If you are a triggered groundwater system and don't have a raw water sample tap, now may be a good time to consider installing one. Installing a raw water sample tap at your convenience is better than installing one in a tight time frame; particularly, in response to a positive total coliform result. [Regulation 11](#), Section 11(4) of the [Colorado Primary Drinking Water Regulations](#) outlines requirements for triggered source water monitoring of groundwater systems. These requirements state that a source water sample must be collected no later than 24 hours from notification of a positive total coliform distribution sample. If you do have a positive total coliform distribution sample, your time is better spent investigating the source of the positive sample result rather than rushing to install the capability to obtain a raw water sample. This issue would be compounded if you had more than one source online at the time of the positive total coliform sample, as each contributing source would need to be tested. Further information about the requirements of triggered source is available in [Regulation 11](#) or by contacting your [compliance officer](#).

Another reason for the installation of a raw water tap is that your groundwater source may need further evaluation to ensure that it is actually groundwater and not groundwater under the direct influence of surface water. In March 2012 the Water Quality Control Division issued Policy 3 as a means for determining whether or not sources are under the direct influence of surface water by an objective analysis of raw water data. Therefore, if you have a shallow ground water source not in a confined aquifer, you may receive additional sampling requirements from the division that would require you to have a raw water sample tap. Sampling can include temperature, turbidity, conductivity and micro particulate analysis.



Raw water taps for two wells.

## Safety Tip:

A few near death and even fatal incidents have been in the local news recently. Two men went on a fishing trip for a couple of days and their boat capsized, a woman trapped in her car for several days before she was found and a family in a pickup went off the road into raging waters. Regardless of the weather or road conditions, we need to notify spouses, children, boss or friends about our expected destination, travel routes and return. This notification process actually saved the lives of the two fishermen. It's something to think about and it might save your life.





# Drinking Water Quiz

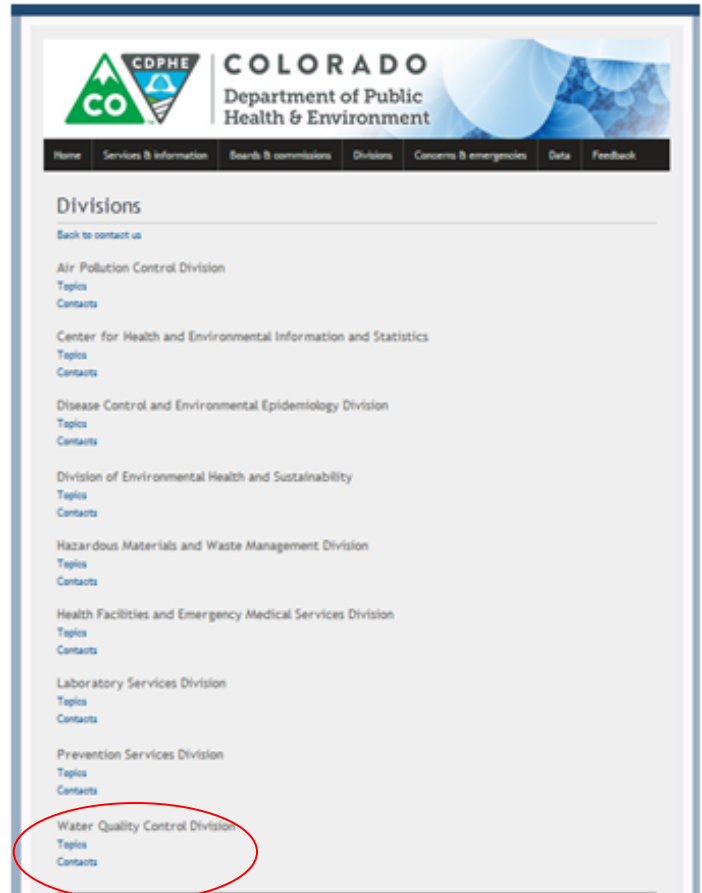
Think you know everything about drinking water? Prove your drinking water knowledge with our quiz. Complete all four 2014 drinking water quizzes [online](#) and you'll be entered in a drawing to receive *AWWA Water Operator Field Guide*, valued over \$50. The drawing will be held in January 2015. Go to <http://fs8.formsite.com/cohealth/form370/index.html> to record your answers. Answers will appear in the next issue. The spring 2014 quiz answers are on page 12.

1. How long after being notified of a positive total coliform distribution sample do you have to collect a raw water sample to be analyzed for total coliform?
  - A. 12 hours.
  - B. 24 hours.
  - C. 48 hours.
  - D. 72 hours.
2. The Environmental Protection Agency approves waivers to state revolving fund borrowers under the American Iron and Steel requirement?
  - A. True.
  - B. False.
3. The certified operator in responsible charge (ORC) may delegate tasks or activities to non-certified personnel if:
  - A. Owner grants permission.
  - B. Division authorized the delegation of tasks.
  - C. ORC has a written operating plan detailing tasks or activities.
  - D. Never, all personnel must have at least an entry level certification.
4. Public water systems established before 2001 have already completed the \_\_\_\_\_ phase of the source water assessment and protection program?
5. On the redesigned website, how does one navigate to emergency notification contact information?
  - A. From [www.colorado.gov/cdphe/wqcd](http://www.colorado.gov/cdphe/wqcd) click on *Concerns & emergencies* in the black navigation bar.
  - B. From [www.colorado.gov/cdphe/wqcd](http://www.colorado.gov/cdphe/wqcd) type *emergencies* in the search box in upper right corner of screen.
  - C. From [www.colorado.gov/cdphe/wqcd](http://www.colorado.gov/cdphe/wqcd) select *Services and information*, then *Environment* and scroll to *Emergency response and spills*.
  - D. All of the above.
6. How can I get answers to questions about my water system anonymously?

# Website redesign

The Colorado Department of Public Health and Environment has designed a clean, simple and easy-to-understand website that became live June 25. For the last six months, we've been working with department content experts and design teams from the web development industry to update and redesign our website. We've simplified content. We've organized content based on topics, not on our organizational silos. We've designed our site for faster loading and to be easy to read on mobile devices. We made the language concise and understandable and our services readily available. If we don't offer a service or information in a particular area, we show you who in the state -- public or nonprofit -- is offering it. The launch of our new site is not the end of a process; it's the beginning of a new design geared to serve you and all our Web visitors. We'll continue our work to make it even better. [Contact the webmaster](#) with feedback on the new website.

Locate Water Quality Control Division by selecting *Divisions*, scroll to *Water Quality Control Division* and select *Topics*.



# Practical source water protection

## Coach's Corner

by Mike Bacon, drinking water coach

Water is a gift of life! If this valuable gift is not protected, the gift can lose its value, could cost more to treat or not be as plentiful. Source water protection is important in Colorado. Whether your system is groundwater, surface water or even a consecutive public water system, the water system, your consumers and your gift needs to be protected.

Protected from what?

1. Contamination from chemical, microbiological or even radiological sources. Some contaminant sources include pesticides, nitrates, agricultural runoff, grazing impacts, oil and gas operations, car washes and more.
2. Economic loss due to additional treatment costs.
3. Environmental degradation of quality of life, depletion of finite resource or loss of recreation and tourism.

Participating in the source water assessment and protection program is a great way to protect your valuable gift. There are two phases of the program. The first phase is the assessment phase which includes delineation, contaminant inventory, susceptibility analysis and the SWAP report to the

public. Good news for you is that systems established before 2001 have already completed this phase.

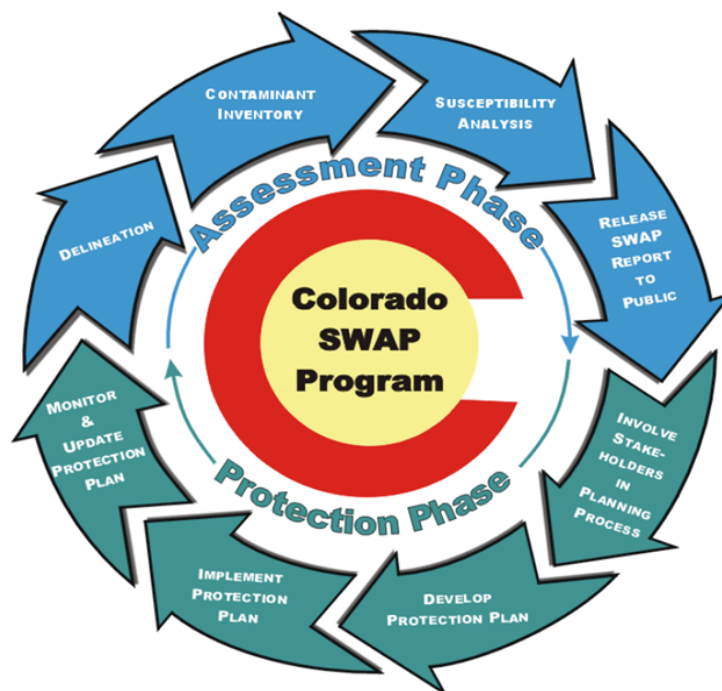
The second phase is the protection phase and involves the stakeholder planning process, developing a protection plan, implementing the protection plan, and last, monitoring and updating the protection plan. This part of the program is up to the system to develop.

Being proactive has its benefits. Of all the public water systems in Colorado, only 200 have developed and implemented a source water protection plan. Colorado is a beautiful state with a number of water sources worth protecting. Will you help protect this valuable gift?

To get started on your source water protection plan, call John Duggan at 303-692-3534, or visit the Colorado Rural Water Association website at [www.crwa.net](http://www.crwa.net). Tell them the coach sent you.



Drawn by Tiffany Jackson



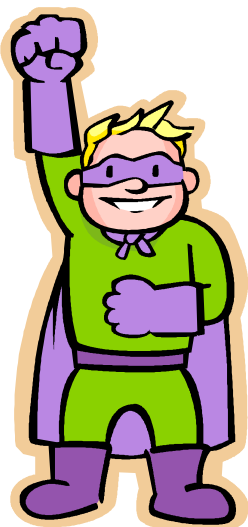
# Ask Aqua Man

Dear Aqua Man,

Help! With all of the juggling of tasks I do as an operator it would be helpful to get a friendly reminder for upcoming sampling requirements. Is there a resource available for operators and administrators of public water systems to receive periodic sampling reminders and updates on information regarding drinking water regulations in Colorado?

Sincerely,

Confused in Carbondale



Dear Confused in Carbondale,

Funny you should ask; there is such a resource. The Water Quality Control Division's drinking water compliance assurance section provides a free resource to operators, administrators and anyone else interested in drinking water regulation, called the *compliance assurance reminder email*, commonly referred to as CARE. CARE provides monthly emails with sampling reminders for public water systems, regulation updates, rulemaking information, operator certification information and a host of other topics relevant to drinking water regulations. Anyone can register to receive CARE emails by visiting the drinking water compliance assurance section's website at [wqcdcompliance.com](http://wqcdcompliance.com) and scrolling down to the *compliance information* section, which includes a link titled [compliance assurance reminder email registration](#). You can also go directly to the CARE registration website by typing [wqcdcompliance.com/care](http://wqcdcompliance.com/care) into your web browser. Once there, enter your name and email address, click *submit* and you are good to go. You can also contact the drinking water compliance assurance section at 303-692-3556 to request addition of your email address to the CARE distribution list.

# Quiz Answers

Answers to the drinking water quiz published in the spring 2014 issue of *Aqua Talk*.

1. What's the name of the new federal requirement for state revolving fund projects? *American Iron and Steel requirement.*
2. Select the three steps that a system must complete to pursue drinking water excellence award for 2014. *A. Set goals, D. Improve performance and E. meet excellence criteria.*
3. What topics will the local assistance unit's basic operator training include? *M. All of the above. Disinfection, basic math, operation and maintenance, source water protection, standard operating procedures, monitoring and reporting, sampling procedures, cross connection, emergency planning, asset management, sanitary survey preparation and regulations will be included in the local assistance unit's basic operator training.*
4. Does the division allow electronic submittal for consumer confidence reports? *Yes.*
5. What is the deadline for community water systems to deliver consumer confidence reports to their customers? *July 1, 2014.*
6. Which advanced oxidation processes are typically used in Colorado? *D. All of the above. Advanced oxidation processes utilizing chlorine dioxide, ozone, ultraviolet light and hydrogen peroxide.*
7. When was Policy 4 published? *October 2010.*
8. Did the recent Colorado Primary Drinking Water Regulations update include changes in how the regulations are implemented? *No.*



# Coming Down the Pipe...

## Military veteran experience applied to water industry

by Rebecca Miller, water quality intern

It's no surprise the latest job opportunity trends for military veterans have been with energy and utility companies. Military service teaches more than combat tactics and weapons, it conditions members for adaptability and instills an invaluable work ethic. Technical expertise and on the job experience gained while in the field make veterans good candidates for doing similar work stateside, especially with an estimated third of the utility workforce reaching retirement age within the next decade. The Environmental Protection Agency, American Water Works Association, Water Environment Federation and Department of Veterans Affairs have joined forces to evaluate which of the branch specific jobs translate to civilian experience and the overlapping subject matter. Water reconnaissance, desalination, raw and product water quality testing, pump operation and maintenance, distribution and storage are just a few of the topics veterans learn and practice in the service.

Whether it's a Reserve or National Guard member looking for a job after a tour of duty or when an active duty soldier is done and looking to rejoin the civilian workforce, it is in the interest of the water industry to encourage and facilitate their operator certification. A task force in the local assistance unit is working on a project to analyze how time spent in training and deployment can apply toward the experience requirement for certification. Ideally, this will allow the veteran to focus on the series of exams and expedite certification to higher classes. Another aspect of the project is to establish outreach and training sessions at military installations across the state to assist service members interested in seeking employment in the water and wastewater

industry. The sooner we can engage veterans, the sooner facilities and communities can benefit from their experience.



### Water Scholarships for Students

If you are a student interested in going into a water related career, [Seametrics Blog](#) lists several scholarships available to support your education.

# Facility Operator Program

by Jackie Whelan, Facility Operator Program



The [Water and Wastewater Facility Operators Certification Requirements](#), Regulation 100, requires owners to ensure all water and wastewater facilities operate under the direct supervision of a certified operator and the regulation outlines certification requirements.

**Training:** Basic training is available at no charge by downloading *Operator Basics* at Montana University Water Center [watercenter.montana.edu](http://watercenter.montana.edu). This training course is often sufficient preparation to pass entry level exams in water and wastewater. Additional training is available from many sources. Board approved courses can be found on the Operator Certification Program Office's (OCPO) website at [www.ocpoweb.com](http://www.ocpoweb.com).

Each certification is valid for three years. Professional development requirements must be completed within the three year period. Many training opportunities offered by the Water Quality Control Division are free or low cost to facilitate the on-going education requirements. A list of board-approved courses for training units is available on the Operator Certification Program Office website.

Passing the appropriate level exam is required for certification. Exams are taken sequentially starting at level D for treatment and level 1 for collection or distribution. Exams are offered three times each year. The deadlines to submit exam applications are March 1, July 1 and Nov. 1; there are multiple exam dates and locations in each exam cycle. For an additional fee electronic testing at the OCPO office is available. Information regarding certification exams is available by contacting OCPO at 303-394-8994 or [www.ocpoweb.com](http://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.

**Operator in responsible charge changes:** The owner/permittee with a new ORC must submit a contact update form to the division within 30 days of the change. Forms are available at [www.colorado.gov/cdphe/wqcd](http://www.colorado.gov/cdphe/wqcd). As a courtesy please notify the division in writing if you are the certified operator/ORC and are leaving the facility. Please include your name, the name of the system, the PWSID number or permit number and the effective date of separation.

Additional information is available on the division's website at [www.colorado.gov/cdphe/wqcd](http://www.colorado.gov/cdphe/wqcd), click on facility operator certification.

## To all readers:

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

# Visit Us on the Web

Follow safe drinking water program on Twitter! [@WQCD\\_Colorado](#)

Water Quality Control Division home page

<https://www.colorado.gov/pacific/cdphe/water-quality-control-division-topics>

Water operator training opportunities

<https://www.colorado.gov/pacific/cdphe/drinking-water-training-opportunities>

Aqua Talk online

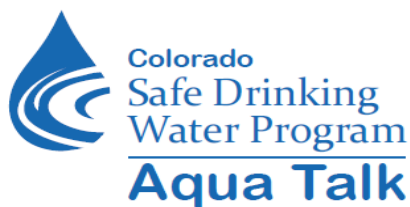
<https://www.colorado.gov/pacific/cdphe/search/site/aqua%20talk>

Inspection services

<https://www.colorado.gov/pacific/cdphe/drinking-water-inspection-services>

Contact list for drinking water regulations

<https://www.colorado.gov/pacific/cdphe/wq-regulations>



## Aqua Talk Newsletter

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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](mailto: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: <https://www.colorado.gov/pacific/cdphe/search/site/aqua%20talk>



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Editor: Jacki Main

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