Colorado
Safe Drinking
Water Program
Aqua Talk

A newsletter from the Safe Drinking Water
Program of the Water Quality Control Division

Colorado Department
of Public Health
and Environment

Groundwater Under the Direct Influence of Surface Water (GWUDI)

Volume 6, Issue 3
Summer 2012

by Tyson Ingles, Lead Drinking Water Engineer

As of March 22 the Water Quality Control Division updated its policy on making determinations for groundwater under the direct influence of surface water (GWUDI). The formal adoption of this policy is the culmination of several years' effort from the division, independent experts and the stakeholder community. This effort allows the safe drinking water program to make more accurate determinations with regard to the *origins* of the source water within a well and thus answer the question as to whether the well water is GWUDI. This determination is critical for a variety of reasons, not the least of which is the tremendous cost to the public water system if its groundwater sources are classified as GWUDI. In addition, accurate determination of whether a well is under the *direct* influence of surface water is absolutely critical in protecting the public from pathogens which can lead to waterborne disease.

Once a well is classified as GWUDI, a public water system is subject to Article 7 of the Colorado Primary Drinking Water Regulations. Article 7 requires a system to install and properly operate the treatment techniques for continuous removal and/or inactivation of *Giardia lamblia* and viruses. The system must install approved filtration within 18 months of the determination. Also, the system must either achieve 3-log inactivation of *Giardia lamblia* through disinfection or maintain 2.0 mg/L at the entry point to the distribution system within 30 days of being notified of the reclassification by the division.

The division originally began the effort to update the GWUDI policy in early 2008. The primary drivers for this policy update included:

- A recognition of inconsistencies between GWUDI determinations at various water systems. General guidance was available but the division relied heavily on inspector and reviewer 'instinct.'
- Several water systems had been required to do performance monitoring on their sources, yet the division did not define how the performance monitoring would be interpreted.
- Proposed requests to develop certain of source waters were difficult to evaluate due to the nature of the aquifers and water use.

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The Revised Total Coliform Rule

by Ron Falco, Safe Drinking Water Program Manager

Hello,

In 2014 there will be a rulemaking hearing before the Water Quality Control Commission to adopt the federal Revised Total Coliform Rule into the Colorado Primary Drinking Water Regulations. This new rule will apply to all 2,050 active public drinking water systems in the state. It will be a sea of change for us all, and with change comes consternation. But I say, "What an opportunity!"

Simply by the nature of the rule, we will be engaging with all stakeholders on a very significant portion of the regulations. We believe we should go beyond simply adopting the revised total coliform rule and undertake an effort to update and upgrade the entire regulation. We can eliminate unnecessary language, remove obsolete references, correct spelling and grammar, and address long-standing concerns like storage tanks and cross connection control. In short, this will be our chance to dramatically improve the regulations, probably for the first time since we originally began to implement the Safe Drinking Water standards.

However, we will not be rolling back requirements. Furthermore, we need to seriously discuss flexibility issues with stakeholders. I think we can agree flexibility in the regulations can provide significant benefits in many cases. Yet we need to be aware of and account for the issues that arise from flexibility. Flexibility can lead to confusion and inconsistency where policies and guidance do not exist. Flexibility also can require more resources at the division both in terms of databases and staff, while funding for such is uncertain at best. We cannot achieve flexibility when do not have the ability to appropriately manage the consequences. Additionally, the division still needs to be able to take strong action when something goes wrong and public health is jeopardized.

Needless to say, this effort is going to be a heavy lift, and we would like lots of input, help and support. We hope you will help us do this. Stay tuned for information about opportunities to participate in the stakeholder process. ♦

Ron Falco, P.E.

Safe Drinking Water Program Manager

Groundwater Under the Direct Influence of Surface Water

(Continued from page 1)

Specifically, entities in Colorado are beginning to utilize recharge basins for surface water rights and then extract the water from the ground in nearby wells.

- A desire to adopt the latest information and research in making GWUDI determinations. The division contracted with Professor Jorg Drewes at Colorado School of Mines to assist in this policy work.

The division will be evaluating all groundwater sources, both existing and new sources, in the state based upon the new policy. The new policy can be found at http://www.cdphe.state.co.us/wq/drinkingwater/pdf/DW003.pdf

The policy includes the following principles:

- All sources need to pass the screening criteria to retain their ground water classification
    - The division considers water that has a time of travel less than 50 days to fail the screening criteria.
- Once a source has failed the screening criteria, it either will be reclassified as GWUDI immediately or the public water system will be required to collect water quality data.
    - Once a system has received a formal data request from the division it can choose whether to collect the data or accept the GWUDI reclassification.
    - The division will analyze the data collected and make a determination in writing at that time. The system will receive the results of the analysis.

The division and systems around the state already have seen tremendous benefits to applying this methodology. Some benefits include, but are not limited to:

- Systems are allowed to collect data to 'prove' a source is ground water
- Of all data requests, most systems prove to be ground water (about 70 to 80 percent), whereas they may have been reclassified to GWUDI in years past.
    - Note: the division views it as *critical* that the 20 percent of systems that prove to be GWUDI install filtration to maintain multiple barriers and protect public health.
- Systems are able to know how new sources will be evaluated and already have started to act proactively when developing new sources instead of *hoping* the division will not classify a source as GWUDI.

In March, the capacity coaching workgroup responded to the need to provide assistance to systems collecting water quality data and effectively partnered with the division's engineering section to launch a compliance assistance effort for 21 of the approximately 40 small water systems that are collecting water quality data to evaluate if they are groundwater systems under the direct influence of surface water. The coaching workgroup's effort included development and implementation of GWUDI training. This curriculum is complete and approved by the Operator Certification Program Office for 0.1 TUs. The capacity coaches have successfully delivered this course multiple times in conjunction with coaching assistance at systems collecting water quality data.

Division staff members look forward to continuing to work with systems on their source classifications and are excited about the benefits and clarity of this new policy.♦

Water Infrastructure Financing Coordination in Colorado

by Barry Cress, Department of Local Affairs, Division of Local Government

The Colorado Water and Sewer Funding Coordination Committee consists of the primary state and federal agencies and organizations that provide grant and loan funding for local water infrastructure projects. At regular meetings, committee members focus on one list of water and wastewater system projects in the state and stay aware of the continually changing status of funding programs. Committee members work together to direct water and wastewater projects to the most viable and practical programs, while considering factors including funding program guidelines and resources, the nature of the project and financial need of the community.

Woodland Park wastewater treatment plant

Available resources from the participating agencies prohibit the committee from considering every project in detail that seeks funding. Rather, the committee focuses on projects that either have difficulty in easily securing funding or need multiple sources of funding. The goals of protecting/restoring water quality, putting the waters of the state to beneficial use, providing affordable infrastructure to economically disadvantaged populations and delivering state and federal resources to needy rural areas, all are regularly pursued by committee members. The committee regularly provides presentations to utility managers at conferences to raise awareness of available funds and explain the types of projects that are most competitive in accessing those funds.

This coordination has taken place among state agencies since at least 1980. At that time the executive directors of the Departments of Health (as the agency was named at that time), Local Affairs and Natural Resources jointly signed a memo expressing interest in tracking the status of local projects and coordinating in this fashion. From 1980 until 2001 the effort operated as the Water and Sewer Needs Committee and in 2001 the committee transitioned to become the Water and Sewer Funding Coordination Committee. Since the beginning, Water Quality Control Division staffers always have been active and key participants. The Department of Local Affairs coordinates the activities of the committee, and maintains a webpage on its website. The webpage is at: http://www.colorado.gov/cs/Satellite/DOLA-Main/CBON/1251599801854

The following agencies and organizations are currently represented on the committee:

- Barry Cress, Colorado Department of Local Affairs, Division of Local Government
- Louanna Cruz, Colorado Department of Public Health and Environment, Water Quality Control Division
- Anna Mauss, Colorado Department of Natural Resources, Water Conservation Board
- Cassandra Eyestone, Colorado Water Resources and Power Development Authority
- Robin Pulkkinen, USDA Rural Development
- Leroy Cruz, Colorado Rural Water Association
- Joshua Griff, Rural Community Assistance Corporation

Georgetown water storage tank

Safe Drinking Water Annual Compliance Report

by Phil Stanwood, Compliance Assurance

Every July the safe drinking water program generates a drinking water annual compliance report to answer the question: "During the previous calendar year how many public water systems were in violation of the Colorado drinking water regulations and why?" The report will be available July 1 at: http://www.cdphe.state.co.us/wq/drinkingwater click the "What's New" section.

The report describes violation information, and includes general information about the safe drinking water program. Examples of general information include a description of the Safe Drinking Water Act as well as the number of public water systems listed by system type and population size.

April 2012 public water system count

Population	Water System Type			
	Community	Non-Transient, Non-Community	Transient, Non-Community	Total
25-500	507	145	907	1559
501-3,300	207	26	79	312
3,301-10,000	78	4	8	90
10,001-100,000	72	0	0	72
>100,000	9	0	0	9
Total	873	175	994	2042

For every drinking water rule the compliance report provides the number of violations and the number of systems in violation by violation category. The violation categories are shown below.

1. **Health-Based:** Potential short-term or long-term health risks
   a. Maximum Contaminant Level (MCL): Contaminant amount exceeded maximum level
   b. Treatment Technique (TT): Water not treated properly
2. **Non-Health-Based:** No short-term or long-term health risks are unknown
   a. Monitoring and Reporting (M&R): Failed to collect or submit required information
   b. Public Notice (PN): Failed to notify consumers

Violation information is summarized in a table where each row defines a different rule (group) and the columns define the violation category. Below is an example of 10 violations of the consumer confidence rule (across 10 systems) and 15 violations of the lead & copper rule (across 5 systems). All of the violations were categorized as monitoring and reporting violations.

Group	Maximum Contaminant Level Violations		Monitoring & Reporting Violations		Public/State Notification Violations		Treatment Technique Violations	
	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations	# of Violations	# of Water Systems with Violations
Consumer Confidence (CCR) Totals:	-	-	10	10	-	-	-	-
Lead and Copper (LCR) Totals:	-	-	15	5	-	-	-	-

EXAMPLE ONLY NOT ACTUAL DATA

In addition, the compliance report lists all public water systems that were in violation with a health-based violation during the previous calendar year. This information also is summarized in a table where each row identifies: the public water system, violation type, contaminant name and resolution status. In the example below, System 1 had high nitrate levels, but was able to resolve the issue. System 2 had high combined radium values and was not able to resolve the issue.

PWS ID	Water System Name	Violation Type	Contaminant Name	Resolved as of 12/31/2011?
CO0xxxxx1	Example System 1	Maximum Contaminant Level	NITRATE	Yes
CO0xxxxx2	Example System 2	Maximum Contaminant Level	COMBINED RADIUM (-226 & -228)	No

To see violation information or to determine whether your system is on the health-based violation list, check out the 2011 compliance report which will be available July 1: http://www.cdphe.state.co.us/wq/drinkingwater under the "What's New" section. ♦

Hiring Contract Operators

by Lori Moore, CWP, Facility Operator Program

The Water and Wastewater Facility Operator Certification Requirements, Regulation 100 (5 CCR 1003-2) requires every water system to be operated with the direct supervision of an operator in responsible charge (ORC) certified at or higher than the classification of the facility. Direct supervision means the ORC has supervisory responsibility and authority with respect to activities and functions of other facility operators. Duties of the ORC are:

- The management or administration of a water facility;
- The accountability for the proper operation and maintenance of the water facility for compliance with applicable regulations, including monitoring and reporting requirements;
- The accountability for the proper operation and maintenance of the water facility;
- The control of, supervision over, or active participation in the daily planning, operation or maintenance of a water facility;
- The authority and/or power to make day-to-day decisions on the operation and maintenance of the water facility; or
- The capacity and availability to perform the above, as well as other functions, of direct responsibility.

This requirement can be fulfilled by a hired employee or contracting with a company providing certified operators.

Contract operators are the ORC for many of the systems in Colorado. The relationship between the operator and the system is defined in the terms of the contract. To meet requirements for an ORC, the contract covers the provisions identified above. Hiring someone to take samples does not meet the definitions of ORC or duties of an ORC.

Hiring an ORC does not relieve the owner of legal responsibility for compliance with the regulations. When water systems are hiring an ORC it is critical to conduct a thorough interview. Ask about current Colorado certifications and verify the certifications with the Operator Certification Program Officd at http://www.ocpoweb.com/index.cfm and call references. Ask the hard questions.

Written expectations of both the owner and the operator ensure a mutually beneficial partnership. Establish expectations by clearly identifying the services contracted, frequency of on-site visits, a schedule for routine sampling and maintenance, the form and frequency of payment for services and reimbursements, defining the ownership and location of system documents, inclement weather, emergency response time, communication with the Water Quality Control Division and attendance during sanitary surveys. All contract disputes are civil matters and the division cannot and will not intervene.

It's critical you conduct a thorough interview. Ask about current Colorado certification and verify the certifications with OCPO. Ask the hard ques-

Contract operators are usually not at the system full time. The water and wastewater facility operator certification board's policy "Delegation of Tasks to Uncertified Personnel" allows the ORC to delegate routine tasks to uncertified personnel if the ORC has trained the person and has a written operating plan in place. The operating plan must be very clear in defining the limits of such tasks. Any operational activity beyond these limits requires the immediate and direct consultation with and participation of the ORC.

Design Criteria Policy Update Process to Begin

The Colorado Department of Public Health and Environment will update the *1997 Design Criteria for Potable Water System Policy* starting in August. The process will begin with three stakeholder meetings held across Colorado. In conjunction, briefing sessions will be held related to the reorganization of the *Colorado Primary Drinking Water Regulations*. To receive notification of meeting dates and locations, subscribe to our listserv by email at co-h2o-info@listserve.com

Misconception About Hach Pocket Colorimeter Detection Limit!!

by Tyson Ingels, Lead Drinking Water Engineer

It has come to the attention of the Water Quality Control Division (WQCD) there may be a misconception in the operator community with regard to WQCD's position on the detection limits of the Hach Company Pocket Colorimeter series of instruments. WQCD has received unconfirmed reports indicating operators have understood WQCD to say the Hach devices do not detect or are not accurate below 0.2 mg/L free chlorine residual. **THIS IS NOT THE CASE!** WQCD would like to affirm the Hach Company has published detection limits for each of its instruments, and WQCD does not challenge those detection limits. Hach Pocket Colorimeter instruments may be used for measurement of residual chlorine in the distribution system.

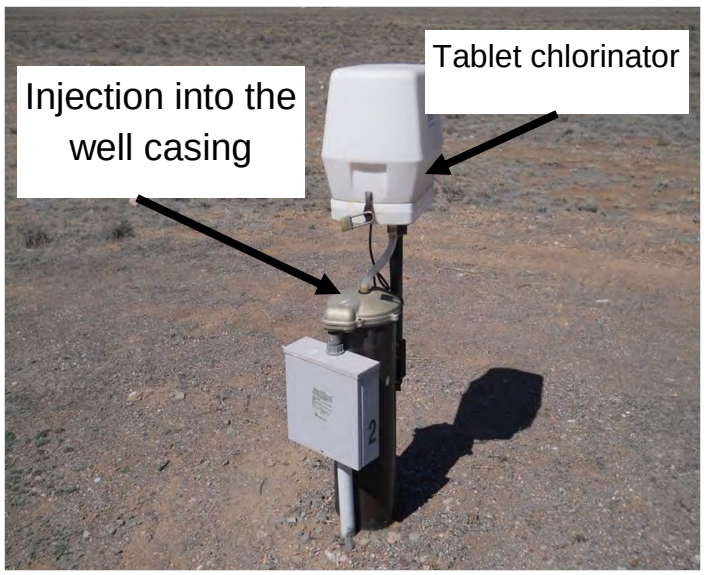
THE REAL ISSUE: WQCD takes the position that for any piece of analytical equipment regardless of manufacturer, a single grab sample made near the detection limit may result in more uncertainty surrounding the sample result.

EXAMPLE: An operator takes a chlorine residual (single grab sample) with her total coliform sample and gets 0.05 mg/L. The operators doesn't retest for chlorine, but reports 0.05 mg/L to the state. How does the operator know it actually had 0.05 mg/L of chlorine in the water?

In a real water matrix with known interferences in any given method, a value of 0.05 mg/L is very close to the method detection limit of 0.02 mg/L. Remember, method detection limits are set in very controlled environments (labs) with precise equipment and highly pure water. WQCD maintains that operators who consistently report chlorine residuals at very low ranges taken from single grab samples may be reporting inaccurate results to the state. WQCD highly recommends taking multiple samples in the event that chlorine residuals are less than 0.2 mg/L in distribution to be certain a detectable chlorine residual actually exists. Many other reasons also should be considered for maintaining a slightly higher chlorine residual in a distribution system (e.g. breakpoint chlorine, tastes and odors). However, WQCD wishes to reiterate the Hach Company has published accurate detection limits for its instruments and the division have no intention of challenging these limits. ♦

What Do You See?

by Paul Kim, Engineering Section



Deficiency: *Colorado Primary Drinking Water Regulations (CPDWR), section 13.3(a) triggered source water monitoring. According to section 13.3(a) of the CPDWR, a groundwater system must conduct triggered source water monitoring if it does not provide at least 4-log treatment of viruses and is notified of a total coliform-positive sample. Triggered source water monitoring requires a raw water sample to be collected from each groundwater source in use at the time the total coliform-positive sample was collected.*

At the time of the sanitary survey, the Water Quality Control Division inspector observed that the system directly chlorinates the well with calcium hypochlorite. With this mode of treatment, the

(Continued on page 13)

Partnerships Make Dream a Reality

by David Dani, Distribution and Security Lead

Findings from sanitary survey deficiencies and acute team responses show that distribution system failures are among the most commonly identified failures affecting Colorado public drinking water systems. This has led to prioritization of distribution system training by the capacity building unit of the safe drinking program and in 2009 a partnership with Red Rocks Community College. The dream was to create a state-of-the-art drinking water training facility to improve available education in the area of water distribution.

On Jan 30, this dream became a reality with the grand opening of the distribution system training center located at Red Rocks Community College in Lakewood. The outdoor training center consists of various hands-on elements designed for operators to gain skills and experience in safe and reliable drinking water distribution:

- Above-ground meter vault with door and viewing windows for training on confined space entry and installation of flow meters, pressure reducing/flow control valves and air relief valves.
- Above-ground piping array with various materials for practicing assembly, tapping and pipe inspection techniques.
- Below-ground leak detection field composed of an assortment of pipe materials and sizes to train students in the detection of water distribution and service leaks which may result in a loss of water and revenue for a municipality and serve as a pathway for outside contaminants to enter the water system.

Consolidated Mutual stops to pose for a picture while installing an 8-inch mainline

Red Rocks Community College students constructing hands-on components of the training center

It is truly amazing a project of this scale was made possible through partnerships that leveraged federal grants supplied by Colorado Department of Public Health and Environment and donations and in-kind services made by many public water utilities. Volunteer labor was provided by Red Rocks Community College students and staff. Consolidated Mutual Water Company donated material and labor to loop an 8-inch mainline that not only improves water quality by eliminating a dead end but provides the required fire protection to allow the Red Rocks Environmental Training Center to expand. Denver Water donated all of the piping in the above-ground piping array that makes it possible for students to practice pipe assembly, tapping and inspection. The utilities involved with this project worked side by side with the college students who gained valuable education and experience.

The distribution system training center provides a resource for use by training partners across the state to train not only existing operators but the next generation of operators. Red Rocks Community College already has integrated the new training center with their water distribution systems curriculum, as well as their new W2AVE short school program. Multiple utilities have begun using the facility to train their own distribution system operators. ♦

Coach's Corner

Drawn by Tiffany Jackson

Conserving Water is Our Job!

by Mike Bacon, Capacity Development Coach

It is time to be a proactive team! It could be a very hot summer with high peak demands! It doesn't matter if you are a groundwater or surface water community system or transient non-community system, higher production rates will definitely occur during the hot summer months. Unlike last year however, we will not see rivers ready to overflow. The mountains did not receive as much snow this past winter/spring, as last year. It is my understanding we are about 30 percent below normal. If we have a hotter than normal summer with less water than last year, we all need to look at ways to conserve water…now!! It will require a balancing act between producing water to supply the needs of the public, but not over producing water where it could affect water quality.

For those that have storage tanks, you need to produce enough water for fire protection, customer demand and water pressure to your system. This summer, I suggest you monitor your storage and demand needs to where you can produce only what you need. So if the water in your tank becomes more than three to four days old, you might consider producing less water in order to maintain a fresher product. You might want to balance your chlorine residuals, water age and water level in your tank so you do not create disinfection by-product (DBP) issues or other water quality issues.

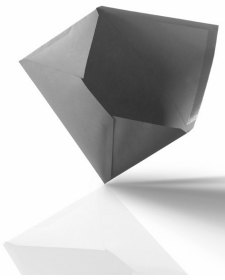
For those smaller systems without tanks, you might not have as much control over production, but you can suggest ways for your customers to conserve water. For example at mobile home parks, suggest water sprinklers remain on for 15 minutes a setting or less, or not leave water running on lawns for extended periods of time. You might find ways to conserve water at campgrounds or RV parks by having the guests not use water from hydrants to wash vehicles.

You know your system better than anyone. So look for ways to conserve, not waste, your water. It is a good thing to do as it protects a valuable resource, but it also can help with water quality as well. Remember, providing safe drinking water to the public is just part of our responsibility to the public: protecting our water supply is another. ♦

DID YOU KNOW… a study conducted by *"24/7 Wall Street" Online Business Journal* and reprinted for *Reader's Digest,* named the top 10 jobs that American cities and communities cannot live without. Water and wastewater operators were named number two, nurses were named number one and firefighters were named number three. The survey provides further proof of how valuable our water and wastewater certified professionals are to the protection of public health and the environment.

Reader's Digest, Online: http://www.rd.com/slideshows/10-jobs-americans-cant-live-without/#slideshow=slide9; (original source material from 24/7 Wall Street Business Journal)

Data submission email change



The email address used for submitting data and forms, cdphe.drinkingwater@state.co.us, no longer will be monitored. Please use this email for submitting data ONLY.

Direct all questions to compliance staff. Contact Information is available at: http://www.cdphe.state.co.us/wq/drinkingwater/pdf/CAS_Contact_List.pdf

Changes to Regulation 100 Operator Certification Late Fees

by Jackie Whelan, Facility Operator Program Supervisor

On April 24 the Water and Wastewater Facility Operator Board made changes to the Water and Wastewater Facility Operators Certification Requirements Regulation 100. One of the changes is the addition of a late fee. Starting **July 1, 2012** there will be an additional administrative late fee charged if:

- the application for renewal is not received on or before the date the current certificate expires.
- the application for certification for new certificates is received 61 or more days after the date of the letter notifying the applicant of eligibility to receive certification.
- the application for certification by reciprocity is received 61 or more days after the date of the letter notifying the applicant of eligibility to receive certification.

Regulation 100 also requires all fees be paid before a certificate is issued, late fee included.

For example, your current certification expires on June 30, 2012, and your application is not received in the Operator Certification Program Office until July 1, you will owe an additional $50 before your certificate will be issued. Or if you've received a letter of eligibility for certification dated May 1, after passing your exam, but your application isn't received by the office until July 1, 61 days later, you will owe an additional $50 to complete your certification.

Be aware of holidays and weekends to ensure your application is received before the deadline. If the deadline falls during the weekend or on a holiday and your application is received the next business day after the certificate expiration date or 61 days after the letter date, it is late and you will owe the additional $50 late fee.

The late fee was added because of the additional administrative costs associated with delays in application for certification or certification renewal. It is important to remember that for many, your certification is a requirement of your employment. This is particularly important if you are the operator in responsible charge. Once the certificate expires you are no longer certified, that leaves your employer in violation of Regulation 100 requiring that their facility be under the supervision of a certified operator. It is your professional responsibility to maintain your certification.

Remember to send completed applications, with any required fees and copies of training unit certificates to the address on the application forms. Do not send them to any other address; the delay in delivery to the correct address may result in being charged a late fee. ♦

Coming Down the Pipe…

Operator in Responsible Charge Compliance Requirements

by Margaret Talbott, Enforcement Supervisor

Under the provisions of the Colorado Revised Statutes, Section 25-9-110 (2)(a), owners of water treatment or water distribution systems in the state of Colorado must be operated under the supervision of a certified operator, which Regulation 100 has defined as an operator in responsible charge (ORC). Additionally, under section 25-9-110 (3), whenever the division has reason to believe that a violation of this statute has occurred, the division shall issue a notice of violation to the public water system. Finally, under section 25-9-110 (5), the division has authority to penalize public water systems up to $300 per day for each violation under this statute.

What this means is that when a public water system does not have an ORC, or has an ORC of an improper level of certification, the Water Quality Control Division must issue a written notice of violation (a formal enforcement action) to the public water system. The division has spent time coordinating the format and process of issuing these notices of violation between the clean water enforcement and drinking water enforcement units.

Last month, the division issued the first newly-formatted notice of violation to a public water system. These notices of violation are in addition to enforcement orders issued for violations of the *Colorado Primary Drinking Water Regulations*, so it is possible for a public water system to receive both an enforcement order and a notice of violation. Like enforcement orders, the notices of violation are posted to our website for the public to see.

The statute additionally provides authority for the division to issue penalties for the ORC violations. The division currently is drafting the ORC penalty policy, and plans to implement it in the coming months. The penalty policy will include provisions for aggravating and mitigating factors and will be consistent with other penalty policies the division uses. We hope the new notices of violation and future penalties will serve as a good incentive for public water systems to stay compliant with the ORC requirements. For further questions about notices of violation or future penalties for public water systems, please contact Jackie Whelan at 303-692-3617 or jackie.whelan@state.co.us. ♦

Public Water Systems Training Grants Request for Applications

by Gloria Duran, Grants and Contracts Specialist

In September 2011, the safe drinking water program successfully piloted the public water system training grants program to provide a new opportunity for qualified applicants interested in partnering with the state to provide training services in high priority subject matter. To continue and expand support for training services, the 2012 public water system training grants program request for applications (RFA) is being released this summer to solicit qualified applicants interested in partnering with the state to provide these services. The public water system training grants program is designed to help fill the training gaps identified through studies conducted by the safe drinking water program. In particular, the grants have an emphasis on encouraging public-private partnerships to provide training services to small public water systems in rural areas of Colorado. This RFA is open to teachers, trainers and subject matter experts to receive grants to fund training projects that promote improved technical, managerial and financial capacity in small public water systems.

Our vision is that all public water system training supported by the Colorado Safe Drinking Water Program is consistently high quality, relevant and well coordinated statewide. For more information about this exciting opportunity please visit us at http://www.cdphe.state.co.us/wq/drinkingwater/. ♦

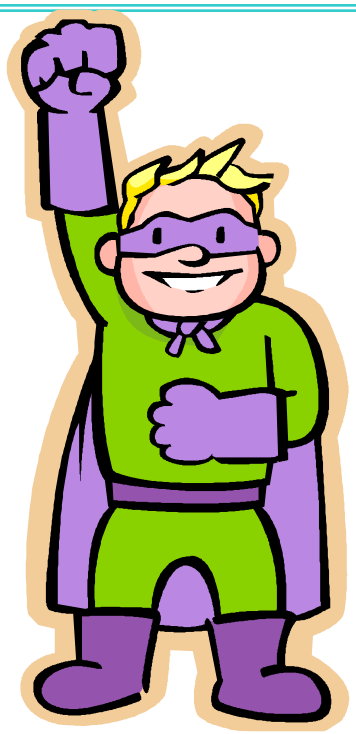
Ask Aqua Man

Dear Aqua Man,

Does the division have a policy stating that total coliform samples cannot be collected at an outside tap?

Sincerely,

T.C. Indawell



Dear Mr. Indawell,

The division does not have a policy against using outside taps for monitoring total coliform; however it is a discouraged practice. The main reason is outside taps are at a greater risk of being contaminated, which can result in a higher incidence of bacteria. The division recognizes using outside taps provides easier access for collecting these samples. However, beware of the increased risk of positive results from outside taps that may cause your system to incur a violation requiring public notice. There are systems that have requested invalidation of a total coliform-positive sample because the sample was collected at an outside location, claiming it was not representative of the conditions of the distribution system. The division will not invalidate a sample solely because it was taken at an outside tap. Food for thought: If the sample had come back clean, would you still consider it an adequate representation of the distribution system?

Sincerely,

Aqua Man

Safety Hint:

Be sure to use sunscreen!!

Facility Operator Program News

by Lori, Moore, CWP, Facility Operator Program

Exam Information

Certification examinations for all levels and categories are offered during three test cycles per year. Deadlines for application submittal are March 1, July 1 and November 1. Dates, locations and applications are on the Operator Certification Program Office website, www.ocpoweb.com

You'll also find applications for renewal and reciprocity along with a statewide list for training opportunities. Be aware of weekends and holidays because late applications cannot be accepted! If you have any questions about examinations or electronic testing options call 303-394-8994.

Water and Wastewater Facility-Operator Certification Board News

To assure adequate operation of water and wastewater facilities, the Colorado Water and Wastewater Facility Operators Certification Board (WWFOCB) maintains a program for the certification of operators of water treatment plants, municipal and industrial wastewater treatment plants, water distribution systems and wastewater collection systems in order to assure protection of public health and the environment. The board encourages public involvement and stakeholder input during regularly scheduled meetings at the Colorado Department of Public Health and Environment, Cherry Creek Campus in Denver.

The board establishes the operator requirements for water and wastewater facilities and the certification of operators. This certification board is the appellate board to turn to if you disagree with a final decision made by either the division or by OCPO regarding facility classifications, notice of violation, or disapproval of an application for exam, renewal or reciprocity. If you file an appeal, please be in attendance at the meeting.

Board meetings are a great opportunity for public water system owners, wastewater facility permittees, or certified operators to express concerns and ideas about issues you're facing, such as succession planning and training needs. For more information visit www.cdphe.state.co.us/op/ocb/index.html or contact Nancy Horan at 303-692-3463.

Renewals: Please check the renewal date on your certification! Renewal applications must be submitted, along with proof of TUs, fees and other documents before the expiration date. Beginning July 1 there will be an additional $50 fee for late renewal. For questions call 303-394-8994 or visit

What Do You See?

(Continued from page 7)

system cannot obtain a raw water sample following a positive total coliform triggered event. Therefore, the system would be unable to comply with the triggered source water monitoring requirements of Section 13.3(a)

In addition, the division now requires groundwater systems to continuously chemically disinfect all sources and maintain at least a 0.2 mg/l residual disinfectant at the entry point to the distribution system. Tablet chlorinators do not consistently provide the proper residual and the division recommends that treatment device be replaced with an approved method of disinfection.

Furthermore, if tablet chlorinators are improperly installed, high doses of chlorine may damage the steel well casing, causing additional maintenance costs for the system.

Larimer County, RMSAWWA and RMWEA $75,000 for Northern Colorado Project

by Melanie Fahrenbruch, Get Into Water! Project Manager

In May of this year the Colorado Department of Labor and Employment awarded $75,000 to the Larimer County Workforce Center to implement the water utility science program in northern Colorado. The Rocky Mountain Section AWWA (RMSAWWA) is the prime subcontractor with the Rocky Mountain Water Environment Association (RMWEA), Colorado Department of Pubic Health and Environment, the City of Greeley, the City of Fort Collins and Weld County Workforce Center, each playing integral roles on the project team.

The region is working together to implement the new Northern Colorado Water Utility Science Program (NoCO WUSP) for prospective entry level water and wastewater employees. Students who complete this training and earn their certification will be qualified to apply for operator positions at dozens of municipalities and utilities throughout Colorado.

The NoCO WUSP will offer a customized learning approach for each student based on his/her interests and abilities. Through classroom courses and field training in fall/winter of 2012, students will learn important fundamentals of water treatment, wastewater treatment, water distribution and wastewater collections.

By March 1, 2013 students will be asked to select the area in which they would like to become certified. Students will apply to take the applicable certification exam. Based on the preferred area of interest, a customized paid internship program will be developed for each student.

During the internship program, the student will work with a utility mentor to gain in-depth knowledge of job requirements and duties (for the area of choice) and study for the certification exam. Finally, the students will be eligible to apply for an On-the-Job Training/ Summer Jobs Program for 2013.

For more information about this program contact Melanie Fahrenbruch, project manager at mel@mjfconsult.com.

Knowledge Management Workshop: Leveraging Intellectual Assets Uncovers Common Issues

The RMSAWWA/RMWEA Knowledge Management Subcommittee sponsored this workshop on April 17 at Denver Water. The workshop was a huge success with more than 30 attendees. Most importantly, the representatives of the 20 utilities that attended learned they are not alone in the effort to capture knowledge from the professionals who are soon to retire from our industry. Case studies in the successful Knowledge Management initiative were provided by Aurora Water, Denver Water, the City of Fort Collins and the Pueblo Board of Water Works. One attendee commented, “I feel like I'm not standing out there alone in this subject any longer and I came away with tools I can leverage in my toolbox.”

Copies of the presentations and handouts are available at: http://www.getintowaterco.org/knowledge-management-resources/books-articles-and-websites/

The Get Into Water! Mission:

The Front Range water and wastewater industry will sufficiently recruit, train and retain personnel to ensure mission-critical positions are filled with qualified, trained & technically skilled employees. This project will address Outreach & Recruitment; Training; Knowledge Retention; and Human Resource and Operations Staff Collaboration.

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- For training opportunities, please visit the division's website at www.cdphe.state.co.us/wq/drinkingwater/trainingevents.html
- To access Aqua Talk online, go to www.cdphe.state.co.us/wq/drinkingwater/QuickLinks.html
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- To access the contact list for drinking water rules, go to http://www.cdphe.state.co.us/wq/drinkingwater/RegulatoryGuidance.html
- Follow the Water Quality Control Division's enforcement activities on Twitter http://twitter.com/WQCD_Enforce

If you have any questions for Aqua Man, please send them to comments.wqcd@state.co.us. Enter "Safe Drinking Water Newsletter" as the subject.

Colorado Safe Drinking Water Program
Aqua Talk

Aqua Talk Newsletter

The following people contributed to the production of this issue of Aqua Talk: Ron Falco, Jacki Main, Tyson Ingels, Paul Kim, Lori Moore, Jackie Whelan, Julie Kreyche, Phil Stanwood, Dan Simpson, Melissa McClain, Margaret Talbott and Mike Bacon.

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.cdphe.state.co.us/wq/drinkingwater/QuickLinks.html

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