



AQUA TALK



Colorado Department
of Public Health
and Environment

Volume 2 Issue 4

October 2008

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



From all of us in the Water Quality Control Division...

May you and your family enjoy a happy and safe holiday season. We are looking forward to another great year in 2009!



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Cross-Connection Control and Reportable Backflow Events

by Jorge Delgado

Public water systems may experience conditions that allow for unintended reverse flow of fluids. This is known as a backflow event. Backflow from a hazardous cross connection can pose a risk to a public water system and its users. Depending on the nature of the hazardous cross connection, these risks may be acute and could cause an immediate health risk to the public. Article 12 of the *Colorado Primary Drinking Water Regulations*, requires public water systems to control all hazardous cross connections. Hazardous cross-connections are to be controlled with department approved backflow prevention assemblies.

In the interest of public health, we encourage anyone aware of a hazardous backflow incident that contaminates a public water system creating a public health risk, to call the department as soon as possible after necessary emergency response calls have been made. The call should be made to the **24-hour Environmental Release and Incident Report Hotline at 1-877-518-5608**. All events should be reported within 24 hours.

When reporting the event, please have available the as much of the following information as possible:

- Date and time of incident
- Location of incident
- Type of threat or incident
- PWSID
- Water system contact name and phone number
- Method of discovery (consumer complaint, witness, perpetrator, employee report)
- Response actions taken (water quality parameter testing, isolation of affected water)
- Recovery actions taken
- Notifications made (law enforcement, news media, etc.)
- Assessment of threat, if possible

The department will provide assistance to ensure the safety of the public and the integrity of the public water system. (Continued on Page 3)





Message from the Drinking Water Program Manager

New Rules in Challenging Times

Since 2007 the Drinking Water Program has adopted the Long-Term 2 Enhanced Surface Water Treatment Rule, Stage 2 Disinfectants/Disinfection By-Products Rule, and the Groundwater Rule. These are major new rules that will apply to every public water system in the state. We are striving to help water systems meet the federal early implementation requirements of the first two rules, and I urge all public water systems to conduct the necessary monitoring and distribution system analysis so the correct approach can be used for your system. Failing to meet the early implementation requirements can have negative consequences going forward. For example, failing to monitor your surface water as required can lead to a higher bin classification than truly necessary, which may in turn lead to a requirement to install additional treatment. We are also reaching out to groundwater systems in advance of the December 2009 effective date for that rule.

In the coming year, the program also will be required to adopt the minor Lead and Copper Rule revisions to avoid seeking an extension from EPA. In response to the Alamosa outbreak, we will be working with stakeholders to update and revise our regulatory approach to disinfection waivers. A number of water systems have also asked that we update and revise Article 12 regarding cross connections.

All of these changes certainly will keep program staff and public water systems very busy. I wish to thank all of the water systems that have worked with us and helped us develop our regulatory language and implementation strategies. Please contact us if you wish to participate in any of these efforts or have some feedback that you would like to provide. We all will be facing these new challenges at a time when economic uncertainty makes it especially difficult to obtain the necessary resources to complete the job at hand today, let alone the resources needed to prepare for tomorrow. We are available to help you and we will continue to sponsor training events all around the state. Through it all, I know that we will all do our best to maintain our vigilance and protect public health. Thank you.



Ron Falco, P.E.,
Drinking Water Program Manager



Sincerely,



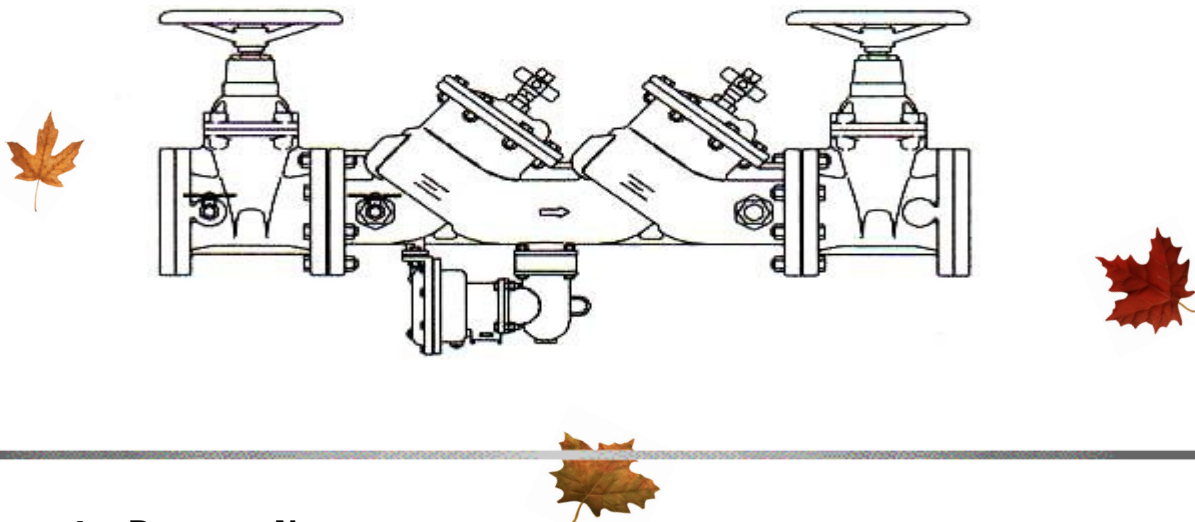
Cross-Connection Control and Reportable Backflow Events

by Jorge Delgado (Continued from Page 1)

If water systems have questions regarding cross-connection control and the reporting of backflow events please contact Jorge Delgado at 303.692.3511.

The department appreciates all the dedicated work that public water systems and members of the

cross-connection control and backflow prevention industry contribute. Great job and continue keeping Colorado drinking water safe!



Facility Operator Program News

Certified Operators – Vital to Our Public Health and Environment

Generally there are three groups who are responsible for our water and wastewater treatment plants: the owner, the operator and the regulatory agencies who govern them.

The owner provides the money, physical facilities, permits to build and operate those facilities, policies for their operation and maintenance, and appropriately certified operators. The regulatory agencies oversee design review, construction and operation in accordance with laws and regulations. But the **frontline of defense and protection** are the operators who oversee the day-to-day operation, record keeping, sampling, testing, reporting, maintenance, and continued training and certification.

Essentially the owner and government may put into place all of the applicable and required operating procedures and laws to protect the public health and environment, but if our professional operators don't or are unable to work to the best of their ability, our

drinking and receiving waters aren't safe.

That is why we so highly value our certified, professional, hard-working, caring, community-minded operators who in their day-to-day operations, ongoing certification and continued education strive for excellence in their work. As many of us know, we are all downstream. We appreciate the many challenges operators face to maintain healthy, clean water sources in a drought-stricken state. So we want to take this opportunity to say **thank you** to the men and women who dedicate their careers to protecting Colorado's waters and who care about us and our environment and health.

Monitoring Schedules

To obtain monitoring schedules for the systems that you serve, please communicate with your system administrative contacts. If you are listed as the administrative contact as well as the operator in responsible charge (be careful!), the monitoring schedules will be sent to your attention. (Continued on Page 4)



Facility Operator Program News

(Continued from Page 3)

This is an excellent opportunity to communicate with the systems that you work with not only in obtaining monitoring schedules but also in discussing system issues, concerns and future plans.

Certification Renewals

Please check your renewal date on your certification! Renewal must be submitted with the appropriate number of training units, a complete application and an application fee **BY THE RENEWAL DATE**. If you think that you may not be able to complete your renewal by the expiration date, please call the Facility Operator Program to request a bridge letter.

Exam Information

Upcoming treatment and small system certification exam dates and locations will be available on the Operator Certification Program Office's website on or around Oct. 1. The exam application deadline for the winter/spring exam cycle is Dec. 1, 2008. Late applications will not be accepted!

WWFOCB News

The next three Water and Wastewater Facility Operators Certification Board meetings are scheduled for Sept. 30, Oct. 28 and Nov. 25, 2008. The meetings are held at the Colorado Department of Public Health and Environment in the Sabin Room in Building A. The meetings begin at 9 a.m. and are an excellent opportunity to hear and be heard. The board welcomes public input. If you would like to provide any additional comment not already mentioned on the published agenda, you should contact Paul Frohardt at (303) 692-3468. Specific agenda information can be found at <http://www.cdphe.state.co.us/op/ocb/MeetingsandHearings/Agenda.html>.

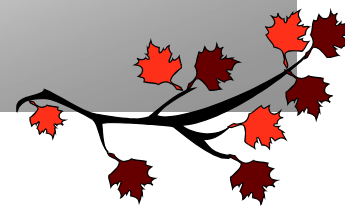
For all other inquiries you may visit www.cdphe.state.co.us/op/ocb (the official Water and Wastewater Facility Operators Certification Board website).



Contacts for the WQCD Facility Operator Program

Betsy Beaver
303-692-3503

Lori Billeisen
303-692-3510



What Is Wrong With This Picture?



We are starting a new column in Aqua Talk: What Is Wrong With This Picture? Each issue will contain a photo of an actual water treatment system in Colorado, with issues identified by our engineers, inspectors or technical staff. Try to identify three things wrong with this picture. If you see something we missed, let us know!

- No labels or indications on chemical feed lines
- General disarray and disorganization
- concentration or feed rates
- with no lids, with no marking for the chemical, the
- Chemical storage in improperly labeled containers

Answers:

- The Drinking Water Program's home page Web address is www.cdphe.state.co.us/wq/drinkingwater/index.html.
- TRAINING OPPORTUNITIES! Please visit the division's website at www.cdphe.state.co.us/wq/drinkingwater/Training.html.
- To access Aqua Talk online, visit www.cdphe.state.co.us/wq/drinkingwater/QuickLinks.html.
- To access the district engineer county listing, visit www.cdphe.state.co.us/wq/engineering/pdf/ESDElist.pdf.
- To access the contact list for drinking water rules, visit www.cdphe.state.co.us/wq/drinkingwater/pdf/CADM_Contact_List.pdf.



Ask Aqua Man

Dear Aqua Man,
My public water system is planning several system improvement projects over the next five years. Do I need to have approval from the state Health Department for these system improvements?

- Confused About Construction

Dear Confused About Construction,

Approval for construction of public water infrastructure is required, prior to commencement of construction, by Section 1.11 of the *Colorado Primary Drinking Water Regulations*.

Projects that require state approval are listed below

- new public water systems
- new sources (e.g., wells, springs)
- new water treatment facilities or improvements to existing water treatment facilities (e.g. a new treatment facility switching from gas chlorine to sodium hypochlorite)
- storage tanks
- modifications to existing water systems that will result in changes to the water quality or treatment process (e.g., coagulant chemical switch)
- distribution system projects that are funded through the state Revolving Loan Program

Projects that do not require state approval are listed below (As-built drawing and/or records should be kept onsite for review during sanitary surveys.):

- in-kind replacement of equipment (e.g., exact replacement)
- piping modifications that do not affect treatment or plant hydraulics
- distribution system projects (unless state loan funded or used for disinfection contact time.)

Dear Aqua Man,

My community system is planning to construct a new water treatment plant. Do we need to hire a professional engineer for the water treatment plant design?

- Pining for PE

Dear Pining for PE,

Community water systems are required to have a professional engineer (licensed in the State of Colorado) design potable water system projects. Non-community water systems are not required to have a professional engineer; however, it may be beneficial for non-community public water systems to enlist the aid of a person who is experienced with water system design. However, state statute requires that any person practicing engineering work must be a registered professional engineer in Colorado.

Dear Aqua Man,

My public water system just finished a new plant construction project that was approved by the State last year. Do we need to do anything, or can we just fire up the plant?

- Almost Home Free

Dear Almost Home Free,

After the completion of construction, a public water system is required to submit a written statement that the facility was built "as approved" and that any conditions of construction approval were met. If the system was designed by a professional engineer, the statement must be submitted by a licensed representative of the design engineering firm. For non-community water systems, the statement must be submitted by an authorized representative of the system responsible for operation and compliance. The statement must be submitted prior to commencing routine operations and state the operational starting date. Remember, within 30 days of any system modifications, a revised monitoring plan reflecting all changes must be submitted to the division. A new "as built" certification form is being developed and should be on the division's website soon.



For more information on the plans review process, please see the Engineering Section website at <http://www.cdphe.state.co.us/wq/engineering/techhom.html> or the New Water System Capacity Planning website at <http://www.cdphe.state.co.us/wq/drinkingwater/NewSystems.html>. If you do not have Internet access, you may call the Water Quality Control Division's Engineering Section at (303) 692-3500 for more information.



Coming Down the Pipe... News Alerts for the Drinking Water Community

- Small System Vulnerability Assessments/ Emergency Response Plans – Colorado Department of Public Health and Environment has been working with several small systems to provide vulnerability assessments/ emergency response plans and training workshops that will be held in late fall and early spring. Be on the lookout for training schedules, or contact Mary Smith at (303) 692-3581 for additional information.
- Impoundments – The Hazardous Materials and Waste Management Division, Solid Waste Unit is rewriting the Waste Impoundment Regulations. Stakeholder meetings have been held in August and September, and the new rule should be proposed in October for a Commission Rulemaking Hearing Nov. 18, 2008. If you have an impoundment (pre- or post- treatment), you should be aware of the impacts of these rule changes on your system.
- Bag Filters – If you use bag or cartridge filters, we would like your input. Please complete the survey sent to you, or go to <http://fs8.formsite.com/cohealth/form304511896/index.html> and complete the survey.
- Sanitary Survey Inspections – The new inspection year began Oct. 1, 2008. If you have not had a sanitary survey of your facilities within the past three years for surface water or five years for groundwater, plan on being contacted by your district or drinking water engineer in the near future to schedule an inspection.
- Ground Water Rule – Ground Water Rule implementation begins on Dec. 1, 2009. If you use groundwater, this new rule will impact your system. Please contact Rule Manager Brian Pickle for additional information (303) 692-3527.
- Monitoring Schedules – The Compliance Assurance and Data Management Section will be distributing your 2009 Monitoring Schedule in December 2008. Be on the look out, and be ready to start your 2009 water quality monitoring.
- The updated Colorado Primary Drinking Water Regulations—5CCR (amended 08/13/07, effective 09/30/08) went into effect at the end of September.



Comings "N" Goings

This is a new section we're providing for our readers to keep them up to date on staff changes within the drinking water program. This month's section lists changes from October 2007 through the end of August 2008.

Comings

Special Programs Unit

Jean Bissett 02/29/2008
Drinking Water Technical Capacity Coach

Compliance Assurance and Data Management

Sean Scott 10/01/2007

Drinking Water Rule Manager

Bryan Pickle 10/05/2007

Ground Water Rule Manager

Laurie Findlay 02/01/2008

Administrative Assistant

Julie Conroy 02/04/2008

Disinfectant/Disinfection Byproducts Rule
Stage 2 Early Implementation

Jeremy Simmons 07/14/2008

Inorganic Chemical Rule Manager

Bryan Pilson 09/01/2008

Drinking Water Compliance Technician

Engineering Section

Bret Icenogle 10/22/2007

District Engineer

Paul Kim 10/29/2007

District Engineer

Kelsey Baertschi 01/14/2008

Drinking Water Engineer

Melanie Criswell 01/14/2008

Drinking Water Engineer

Outreach and Project Assistance

Brandon Koehler 08/11/2008

Project Manager

Michael Beck 08/11/2008

Project Manager

Goings

Engineering Section

Brad Simons 04/30/2008

Engineering Section Manager

Glenn Bodnar 05/13/2008

Drinking Water/Denver Region
Unit Manager

Suzanne Pagorek 05/23/2008

Drinking Water Engineer

Cary Pilon 06/02/2008

District Engineer

Compliance Assurance and Data Management

Elizabeth Mitchell 11/23/2007

Administrative Assistant

Jacob Duvall 03/31/2008

Drinking Water Compliance Technician





Upcoming Training Events



Cross Connection Control and Backflow Prevention

(<http://www.cdphe.state.co.us/wq/drinkingwater/pdf/CrossConn.pdf>)

- Oct. 19-24, 2008 - Silverthorne

Operator Math and Regulatory Review

(<http://www.cdphe.state.co.us/wq/drinkingwater/pdf/OpMathReg.pdf>)

- Dec. 4, 2008 - Loveland

Rate Setting and Budget Development

(<http://www.cdphe.state.co.us/wq/drinkingwater/pdf/RateSet.pdf>)

- Nov. 6, 2008 - Pagosa Springs



Visit the Department of Local Affairs Operator Training Calendar for more operator training opportunities!!



2008 Operator Training Calendar Water and Wastewater Assistance



1313 Sherman Street, Room 521
Denver, CO 80203
(303) 866-2156
www.dola.state.co.us





Contact Information for Individual Drinking Water Rules

Fax (303) 782-0390 or (303) 758-1398

1-800-886-7689 (ext. = last four digits of individual's direct line)

Drinking Water Rule Manager Workgroup Leader

Sean Scott 303-692-3258

Disinfectant/*Disinfection Byproducts Rule*

Stage 1 Rule

Emily Clark (rule manager) 303-692-3502

Stage 2 Early Implementation

Julie Conroy (Early Implementation) 303-692-3405



Total Coliform Rule and Consumer Confidence Report Rule

Cristin Jones (rule manager) 303-692-3308

Surface Water Treatment Rules (SWTR)

SWTRs, Microscopic Particulate Analysis (MPA) and Filter Backwash Recycle Rule

Serenity Valdez (rule manager) 303-692-3519

Long Term 2 Enhanced Surface Water Treatment Rule Early Implementation

Julie Conroy (Early Implementation) 303-692-3405

Lead and Copper Rule and Organic Chemical Rule

Lauren Worley (rule manager) 303-692-3547

Radionuclide Rule

Jacalyn Whelan (rule manager) 303-692-3617



Inorganic Chemical Rule (including arsenic, fluoride, nitrate and nitrite)

Jeremy Simmons (rule manager) 303-692-3325

Ground Water Rule

Bryan Pickle (rule manager) 303-692-3527



Monitoring and Reporting (M and R)

M and R for organic, inorganic, nitrate and nitrite

Desiree Griffin (compliance technician) 303-692-3538

M and R for D/DBP, turbidity

Bryan Pilson (compliance technician) 303-692-3318

Safe Drinking Water Information System (SDWIS) Development and Unregulated Contaminant Monitoring

David R. Rogers 303-692-3535

New Systems, SDWIS Updates (changes in source, treatment, contact info, etc.)

Erica Kannelly 303-692-3543

Laurie Findlay - general assistance (including forms, schedules and other printed materials)

303-692-3556 or 303-692-3541

Inquiries on public notice requirements should be directed to the appropriate rule manager listed above.



Hope you enjoyed our last issue for this year!!

Our next scheduled newsletter will be released January 2009. Please contact us if you have any ideas for articles, funny on-the-job stories, water-related jokes or comments on how we can improve Aqua Talk for future newsletters. Address them to comments.wqcd@state.co.us. Enter "Drinking Water Newsletter" as the subject.





AQUA TALK

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303-692-3500

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Internet address <http://www.cdphe.state.co.us/>

Division Internet address <http://www.cdphe.state.co.us/wq/index.html>

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Editor: Gloria M. Duran

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



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WQCD DRINKING WATER PROG - 2030
