Aqua Talk

a safe drinking water newsletter

COLORADO
Water Quality Control Division
Department of Public Health & Environment

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Summer 2015

IN THIS ISSUE

FEATURES

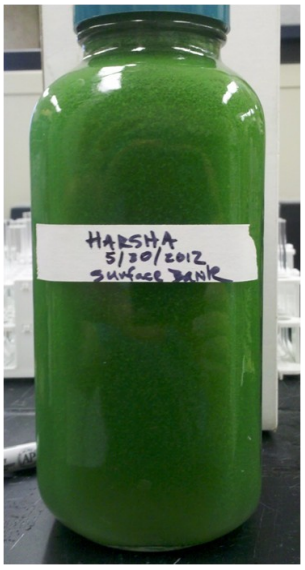
Harmful algal blooms

by Ron Falco, P.E., program manager

Recently, the Environmental Protection Agency released 10-day health advisory guidance for algal toxins in drinking water. These toxins, currently unregulated, are considered quite serious if found in drinking water supplies. In 2016, EPA is expected to develop guidance for recreational waters. The EPA guidance states:

Chemical	10-day advisory	
	Bottle-fed infants and pre-school children	School-age children and adults
microcystins	0.3 µg/L	1.6 µg/L
cylindrospermopsin	0.7 µg/L	0.3 µg/L

These limits are considered 10-day advisories, meaning that, theoretically, there is little health risk in consuming water for a shorter time period. However, EPA recommends treating algal toxins like acute contaminants and issuing public notice immediately after getting a sample result above the limit and confirming it with another high sample result. Each toxin has two different limits. If the lower limit is exceeded, EPA recommends a bottled water advisory for everyone under the age of six. If the upper limit is exceeded, a bottled water advisory is issued for everyone. EPA is also suggesting a five-step monitoring approach for systems. It is worth noting that the detection limit for one of the lab tests EPA recommends using is right at the contaminant limit for issuing public notice.



Blue green algae from Lake Erie

BACKGROUND:

- Cyanobacteria, known as blue-green algae, are present in most surface waters and can produce cyanotoxins. The most widespread of the cyanotoxins are the peptide toxins in

(Continued on page 3)

Public notice and the revised total coliform rule

by Ron Falco, program manager

Hello everyone,

Requirements to notify the public about drinking water concerns were a cornerstone of the Safe Drinking Water Act reauthorization in 1996. This can make water systems uncomfortable because the language required in the public notice always contains information about potential health risks. Even if those risks are very small the language can be scary to people not accustomed to thinking about the risks we face in our daily lives. With the revised total coliform rule plus Colorado initiatives there are requirements for public notice when violations occur. Many of these treatment technique violations involve tier two public notice that must be distributed to customers within 30 days. However, even though the regulations allow 30 days for the notice to occur, that may not be soon enough to meet the public's expectation.

Some of the violations that would require tier two public notice for community systems involve (see Regulation 11 at https://www.colorado.gov/pacific/cdphe/water-quality-control-commission-regulations for complete requirements):

1. Distribution system chlorine residuals below 0.2 mg/L in more samples than allowed based on system size.
2. Failing to conduct a required assessment or corrective action under the revised total coliform rule.
3. Failing to have or implement a finished water storage tank inspection plan.
4. Failing to complete or document corrective actions when a storage tank inspection identifies a sanitary defect.
5. Failing to have or implement a written backflow prevention plan and several requirements therein including adequately controlling cross connections, meeting distribution system survey compliance ratios and meeting requirements for testing or inspection frequencies.

Please be aware of these violations and try to avoid them. Take advantage of the many training opportunities that are available by signing up at http://eepurl.com/bq-NZv . I also recommend planning how your utility would respond in the event that a violation does take place. Make utility and community leaders aware of public notification requirements so they are not caught off guard if the need arises. If possible, try to get public notice out quickly instead of using the full 30 days allowed.

Thank you.

Harmful algal blooms

(Continued from page 1)

the class called microcystins. There are at least 80 known microcystins, including Microcystin-LR, which is generally considered one of the most toxic.

- Ohio regulates microcystins down to 1 µg/L in treated drinking water.
- On Aug. 2, 2014, the City of Toledo detected 2.5 µg/L microcystin in their finished drinking water prompting a do-not-use water ban effecting nearly 500,000 people. The ban was lifted on Aug. 4, 2014.
- The conditions that cause cyanobacteria to produce cyanotoxins are not well understood. Some species with the ability to produce toxins may not produce it under all conditions. It is impossible to tell if a species is toxic or not toxic by looking at it.
- The cyanotoxins affect the nervous system, liver and skin. The presence of high levels of cyanotoxins in recreational water (typically >20µg/L) and drinking water may cause a wide range of symptoms in humans including fever, headaches, muscle and joint pain, blisters, stomach cramps, diarrhea, vomiting, mouth ulcers and allergic reactions.
- In 1996, fifty patients in Brazil died after being exposed intravenously to water containing microcystins at a kidney dialysis center.
- The actual risk from cyanotoxins at low levels in drinking water and the long-term effects to the exposure to these toxins is uncertain.

Source: http://water.epa.gov/scitech/swguidance/standards/criteria/nutrients/upload/cyanobacteria_factsheet.pdf, http://epa.ohio.gov/Portals/28/documents/HABs/PWS_HAB_Response_Strategy_2014.pdf

TREATMENT:

- Generally, conventional surface water treatment consisting of coagulation, flocculation, sedimentation and filtration followed by chlorination is effective.
- During the 2014 emergency Toledo, which utilizes conventional surface water treatment, had 50 µg/L microcystin in the raw water and 2.5 µg/L in the treated water, so it appears that there are limits to treatment efficiency with conventional treatment.
- Treatment for particle removal (up until the filters) is credited with removal of algae. The oxidation (chlorine) is credited with some destruction of the microcystin. Other oxidation technologies can also be effective including ozone and potassium permanganate, but not chlorine dioxide.
- Activated carbon can also adsorb microcystin so water treatment facilities using carbon would have an additional barrier. Carbon can be dosed in powder form or in vessels containing granular media.
- Nanofiltration and reverse osmosis are both capable of removing the toxins.

Source: http://epa.ohio.gov/portals/28/documents/HAB/AlgalToxinTreatmentWhitePaper.pdf

Now, let's switch gears to a lesser crisis. Suppose that due to an equipment malfunction followed by an alarm breakdown that does not alert you, your filtration system does not meet turbidity limits for a short time period. The drinking water acute team will evaluate the situation, and if there is not an acute risk, then tier 1 public notice would not be needed. However, this situation likely still represents a health-based violation of the *Colorado Primary Drinking Water Regulations* and triggers a tier 2 public notice. Tier 2 public notice must be issued as soon as practical, but no later than 30 days after the event. Again, will your customer be satisfied with finding out about a violation a month later? Will this generate media interest along the lines of "Why did you wait so long to tell people?" Again, planning for these situations in advance can help you meet not only regulatory requirements but also customer expectations.

Small communities grant application

by Mike Beck, grants and loans unit

This fall, the Water Quality Control Division will release a request for applications for the small communities water and wastewater grant fund. This will be the second consecutive year the division releases funding to systems. Based on the high response of applicants last year, the division expects to receive many applications in the second round.

Senate Bill 14-025 revised and consolidated the small communities water and wastewater grant fund to be codified in Colorado Revised Statute, Section 25-1.5-208 concerning the establishment of a grant program under the Colorado Water Quality Act to assist suppliers of water and domestic wastewater treatment works that serve a population of less than 5,000 people to protect public health and water quality. The grant fund is from the severance tax perpetual base fund and will be applied to both drinking water and wastewater projects.

The division is awaiting final funding projections for state fiscal year 2016. Questions on the small communities grant can be directed to cdphe_grantsandloans@state.co.us.

Excellence award winners

By Kaitlyn Minich, local assistance unit

Celebrating Colorado's safe drinking water week, May 3 to 9, Water Quality Control Division's Kaitlyn Minich presented the Town of Fraser with a drinking water excellence award certificate. The system, one of four participants in the new pursuing excellence program, has taken impressive steps to protect their source water and optimize their water system. The system's certified operator in responsible charge, Adam Cwilkin, is planning to use a GIS program to optimize the system's flushing program and ensure the system will meet future residual disinfection concentration requirements at all points in the distribution with minimal water loss. The other three participants, Castle Pines Metro District, Hoover Hills Water and Sanitation District, and Rifle Gap State Park also received certificates recognizing their participation in the pursuing excellence program.

New water hauler rule is now effective

by Nicole Graziano, drinking water compliance assurance section

On March 20 the Water Quality Control Commission adopted revisions to Regulation 11, of the Colorado Primary Drinking Water Regulations. This included the addition of the water hauler rule, which applied to the approximately 40 public water systems that haul water. The rule became effective May 1 and provides:

- A definition for a public water system that hauls water.
- A requirement that water haulers must operate in accordance with a department approved operational plan. Failure to operate in accordance with a department approved operational plan is a treatment technique violation.
- Additional chlorine residual monitoring requirements. On each day that a tank or container is used to deliver water, water haulers must monitor the residual disinfectant concentration of the water dispensed from each tank or container at least once. If a water hauler uses more than one water loading station per day, the water hauler must also monitor the residual disinfectant concentration of the water dispensed from the tank or container at least once for each water loading station used.

To assist with the operational plan requirements, the department developed an Operational Handbook for a Colorado Public Water System that Hauls Water. It is available on the department's website at www.colorado.gov/cdphe/wqcd, type water hauler rule in the search box.

The department is currently developing additional guidance materials, such as frequently asked questions and a best practices document that will be incorporated in the department's handbook. Once the documents and materials are finalized, they will also be posted on the department's website.

Electronically submit compliance data

by Nicole Graziano, drinking water compliance assurance section

As of June 15, the department's drinking water email box, stopped accepting email submissions, including drinking water compliance submittals. Anything sent to this email address will not be received by the department. Do not despair! The department created the drinking water web portal. The portal was designed to eliminate errors and missing information for submittals because the upload process incorporates complete and accurate system, monitoring point and analyte information. The portal also allows water systems and labs to see files that have been uploaded and submitted, so the long-standing issues with lost or misplaced submittals will be resolved.

The portal is easy to use and is available online. Currently, over 300 public water systems and laboratories are using the portal to submit drinking water compliance data. Signing up is easy. The best way to get started is to watch our YouTube videos about the portal at https://www.youtube.com/user/wqcdcompliance. Then, you can create an account at the portal located at http://wqcdcompliance.com/login.

If you have technical questions or issues about using the portal (e.g., creating log in accounts, file formats, uploading files, understanding drop down options on the portal, etc.), please email Kaleb at kaleb.winisko@state.co.us or Whitney at whitney.walker@state.co.us.

Public water systems and Colorado discharge permits

by Jorge Delgado, P.E., field services section

Many drinking water treatment processes create waste streams such as filter backwash waste, reverse osmosis brine or clean-in-place chemicals that need to be disposed of appropriately. Some public water systems choose to dispose of their waste via discharges to the sanitary sewer or hauling to an appropriate waste disposal site. Many others choose to dispose of the waste via discharging to waters of the state. The Colorado Water Quality Control Act, C.R.S. 25.-8-501, requires that discharges to waters of the state must be permitted by the Colorado Department of Public Health and Environment. Public water systems that have obtained a Colorado discharge permit are subject to departmental compliance evaluation. Inspections are typically performed along with an accompanying sanitary survey.

Typical compliance items observed during compliance evaluation inspections include appropriate record keeping requirements specified in either the Colorado discharge permit system COG641000 general permit for water treatment plants or an individual discharge permit. When obtaining and maintaining records associated with a discharge permit the following information generally must be included:

- The date, type, exact place and time of sampling or measurements.
- The individual(s) who performed the sampling or measurements.
- The date(s) the analyses were performed.
- The individual(s) who performed the analyses.
- The analytical techniques or methods used.
- The results of such analyses.

The department recommends the public water systems develop a laboratory bench sheet which includes the record keeping information specified in the associated permit and those mentioned above. Please feel free to contact your field services section county contact with any questions regarding your facility's record keeping practices for both drinking water and wastewater related activities.

Sample General Permit COG641000 Laboratory Bench Sheet

Location: [Public Water System] sample point 001A, [receiving water body]

Parameter	Date	Sample Type (Visual, Continuous, Instantaneous, In-situ, Grab, Composite, 24-hr Composite)	Time of Sample Collection	Individual whom Collected Sample	Date of Sample Analysis	Time of Sample Analysis	Individual whom Performed Analysis	Analytical Technique or Method Number	Sample Result (units)	Notes
Flow										
Total Suspended Solids										
Oil and Grease										
***Note if Oil and Grease Visual a yes then system must collect a grab sample										
pH										
Total Residual Chlorine										
Total Dissolved Solids										
Total Phosphorus										

Drinking water quiz

Think you know everything about drinking water? Prove your drinking water knowledge with our interactive quiz. Complete all four 2015 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 2016. Please go online to record your answers. Answers will appear in the next issue. Enjoy!

1. EPA's rip and run incident checklists cover the following emergencies:
   A. Wildfire.
   B. Drought.
   C. Flooding.
   D. All of the above.

2. When will the small communities grant accept applications?

3. What age group benefits the most from water fluoridation?
   A. Toddlers.
   B. Adults.
   C. Elderly.
   D. None of the above.
   E. All of the above.

4. EPA recommends treating algal toxins like acute contaminants and issuing public notice immediately based on test results.
   A. True.
   B. False.

5. When did the new water hauler rule become effective?
   A. April 15, 2015.
   B. May 1, 2015.
   C. June 1, 2015.
   D. July 1, 2015.

6. There will be a stakeholder process prior to the August 2016 rulemaking hearing regarding revisions to Regulation 11.
   A. True.
   B. False.

7. Failing to conduct a required assessment or corrective action under the revised total coliform rule requires a tier two public notice.
   A. True.
   B. False.

8. Drinking water compliance data may be submitted electronically.
   A. True.
   B. False.

Spring quiz answers

1. Name a location where a revolving fund workshop was or will be conducted. *G) All of the above.*
2. What are the most frequent customer complaints about their drinking water? *D) All of the above.*
3. Who is the current director of the Water Quality Control Division? *Patrick Pfaltzgraff*
4. As of June 15 will the drinking water email box accept compliance submittals? *No*
5. Can a drinking water system have more than one certified operator in responsible charge? *Yes*
6. What are issues that impact treatment and disinfection log inactivation treatment credits? *E) All of the above.*

Why water systems fluoridate

by Clayton Moores, field services section

The Center for Disease Control and Prevention named community water fluoridation one of the 10 greatest public health achievements of the 20th century. Many water supplies have naturally occurring fluoride, but often at levels too low to prevent tooth decay. Adding fluoride to drinking water to reach the optimal level helps prevent tooth decay and reduces oral disease by as much as 40 percent. In Colorado, fluoridation additives must be certified to the National Sanitation Foundation/ American National Standards Institute Standard 60. The certification process ensures that additives meet the highest standards of quality, safety and purity. Additives used at public water systems are inspected for NSF/ANSI Standard 60 certification during sanitary surveys.

There are benefits of drinking fluoridated water for all ages. Toddlers benefit during the formation of teeth, children have reduced occurrences of cavities and painful procedures, adults are able to slow down and even reverse the progress of cavities, and the elderly are able to retain natural teeth longer due to a decrease in cavities. The benefits of drinking fluoridated water are only realized through continuous exposure at optimal fluoride levels. Continuous fluoride exposure works to prevent cavities through the ingested fluoride found in the saliva and plaque slowing enamel deterioration from bacterial decay. Fluoride also re-mineralizes enamel that has been compromised.

On April 27, the U.S. Department of Health and Human Services released a new optimal fluoride level of 0.7 mg/L, which replaces the 1962 recommendation of 0.7 to 1.2 mg/L. The change reflects Americans' increased access to more sources of fluoride, such as toothpaste and mouth rinses, than previous years when fluoridation was first introduced in the United States. The new optimal level will maintain the protective benefits of water fluoridation and reduce the occurrence of an aesthetic effect known as dental fluorosis. "While additional sources of fluoride are more widely used than they were in 1962, the need for community water fluoridation still continues," said U.S. Deputy Surgeon General Rear Admiral Boris D. Lushniak, M.D., M.P.H. "Community water fluoridation continues to reduce tooth decay in children and adults beyond that provided by using only toothpaste and other fluoride-containing products."

Revised total coliform rule training and guidance

by Ron Falco, P.E., program manager

This year the Colorado Department of Public Health and Environment substantially revised the Colorado Primary Drinking Water Regulations, Regulation 11 including adopting the federal revised total coliform rule, defining a regulatory minimum for distribution system disinfectant residual, creating a storage tank rule, water hauler rule, and overhauling the existing backflow prevention and cross-connection control rule. As a result, the department has been working hard to develop training and guidance materials for public water systems to better understand and meet the new regulatory requirements.

New training materials, guidance and forms will be published to the department website as they are finalized. The department is currently working on:

- Water hauler operational handbook.
- Seasonal system startup certification form.
- Backflow prevention and cross-connection control rule policy.
- Finished water storage tank guidance and various templates.
- Updated public notification templates.

The department is also presenting at the following Action Now seminars:

- July 23 in Glenwood Springs.
- August 20 in Alamosa.
- Oct. 22 in La Junta.
- Nov. 19 in Grand Junction.

For more information on the Action Now seminars, please visit the Rocky Mountain Section of the American Water Works Association's website at http://www.rmsawwa.net.

The department is also planning to schedule additional training events. All training events will be emailed to interested participants through the department's listserve.

Rulemaking hearing August 2016

By Jennifer Robinett, drinking water compliance assurance

In August 2016, the Safe Drinking Water Program will participate in a Water Quality Control Commission rulemaking hearing to revise the Colorado Primary Drinking Water Regulations, Regulation 11. The proposed scope of revisions to Regulation 11 includes:

- Cleanup of items from the 2015 revised total coliform rule and Colorado initiatives rulemaking hearing,
- Addressing specific comments received from the Environmental Protection Agency regarding the 2013 increased readability rulemaking hearing
- Resolving other issues from prior regulation revision work that were not completed or require changes.

The program does not plan to introduce any major statewide revisions in regulatory requirements for this rulemaking hearing, but water systems should pay close attention for any items of interest. There will be a stakeholder process prior to the August rulemaking. Information regarding the stakeholder process will be sent via the program's listserve and will be available on our website, so please stay tuned! If you are not yet registered for the listserve and are interested in receiving notices about drinking water regulation and policy revisions, please sign up at the following link: http://eepurl.com/bq-NZv. Stakeholder engagement in our regulatory revision work is important and results in the best outcomes for the program, the public and regulated community.

Indirect integrity testing: Turbidity on every membrane skid

by Tyson Ingels, P.E. engineering section

In 2005, the Environmental Protection Agency published a membrane filtration guidance manual.

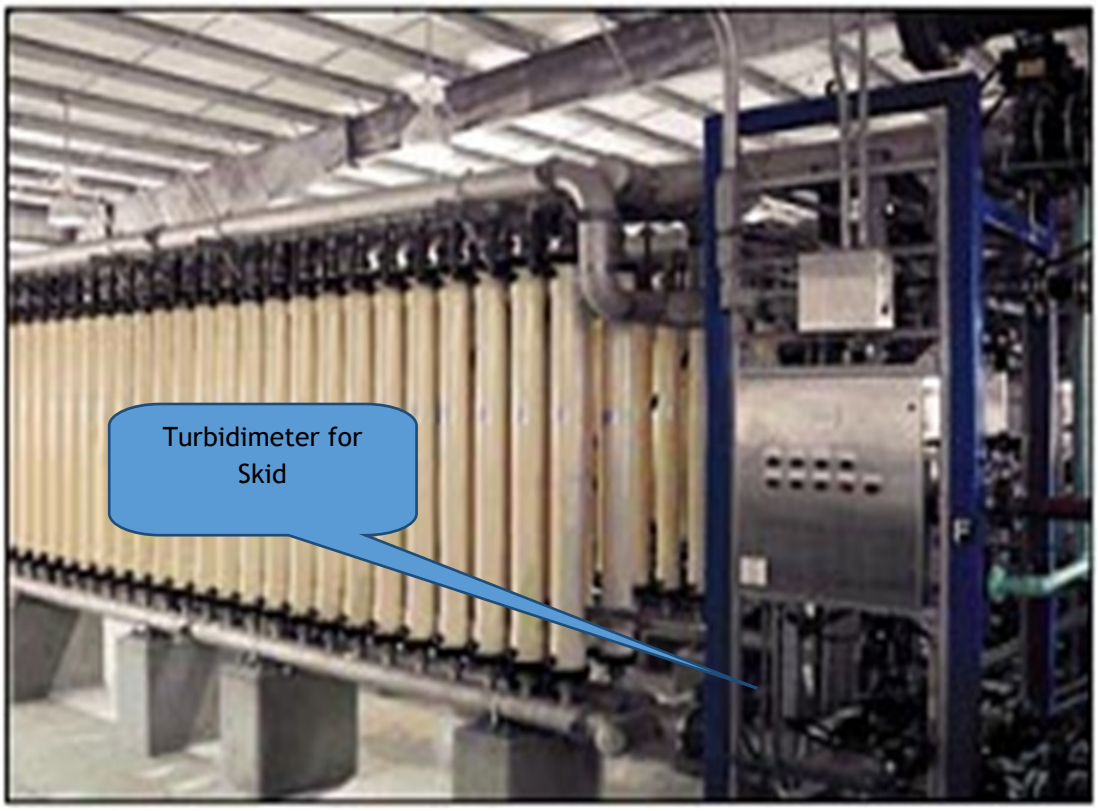
While the publishing of this manual was primarily to prepare for the long term 2 enhanced surface water treatment rule, nearly all states used the manual as a basis for acceptance of membrane filtration technologies to comply with the traditional requirements of the surface water treatment rules. Various states have different levels of stringency regarding accepting alternative filtration technologies, but nearly all use the technical basis for acceptance originated in the EPA guidance manual.

In 2014, the department updated all the membrane acceptance documents currently allowed for use in Colorado. A minor discrepancy was noted when updating the different acceptance documents of the individual manufacturers. Not every acceptance document included the requirement to monitor for indirect integrity.

Indirect integrity testing is typically accomplished by individual turbidimeters on each membrane skid. Note: not every module needs to be monitored. The continuous indirect integrity concept is outlined in detail in Section 5.0 of the guidance manual.

The department corrected this discrepancy and updated all membrane acceptance documents to include indirect integrity monitoring in conformance with the guidance manual. The department wants existing surface water treatment systems utilizing membranes to understand that the expectation has always been for continuous indirect integrity monitoring to occur on each membrane skid. Therefore, water systems that use membranes and do not have continuous indirect integrity monitoring are expected to install the appropriate equipment and should consider consulting with their specific membrane manufacturer. Updated Colorado specific acceptance documents can be found on the division website.

A typical monitor is shown at left.



Ask Aqua Man

Dear Aqua Man,

In this day and age it seems many processes, procedures and systems are going paperless. This seems to be true in the water and wastewater industry as well. iPads and code scanners are replacing the clipboard and pens that were standard equipment just a few years ago.

My question concerns records of analyses, sampling, testing, and such required to be kept under the Safe Drinking Water Act. Can these records be stored electronically if they are made available to the state if requested? If yes, then how does that relate to the below types of records?

1. Scans of original source bench and lab sheets.
2. Operator data and logs kept in a spreadsheet or database.
3. Data recorded only on a digital tablet device.

Also, are there any guidelines or requirements for how this electronic data should be stored and backed up?

Thanks for your great work with Aqua Talk. It is very informative and I look forward to receiving it.

Sincerely,

Reeling from Records Requirements

Dear Reeling,

The department agrees that going paperless is the way to go as it produces less waste in the environment! To answer the first part of your question, regulations require all public water systems to submit copies of any required records or documents in existence produced upon the department's request. However, the regulations do not specify how the documents must be stored. Therefore, systems can manage their documents in the format that best works for them, hardcopy or electronic format.

To answer the second part of your question, the department does not have any requirements for how electronic data should be stored and backed up. However, systems must keep records and documents for the required time period identified in the regulations. Microbiological sample results must be maintained for at least five years, chemical sample results must be maintained for at least 10 years. Systems may incur violations if they cannot produce the department requested records.

I am glad to hear that you find these questions informative. Please keep sending the excellent questions in!

Sincerely,

Aqua Man

Your turn: Ask Aqua Man

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

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

Dear Aqua Man,

I keep hearing about this new drinking water portal but I'm confused about how to get started. Can you please help me out?

Sincerely,

Apprehensive Operator

Dear Apprehensive Operator,

The drinking water portal is an online submittal website that replaced the drinking water email box. Anything you previously emailed to this account should be submitted via the portal. Plus, there are some extra benefits!

The portal is a great way for water systems, laboratories and the state to track submitted files. This eliminates the problem of lost data. When using the portal you will receive an email notification for your records when you submit a file. You can also go to your portal file cabinet and view files you submitted and obtain a document receipt. Files submitted by laboratories on behalf of water systems will automatically be placed in the water system's file cabinet. Water systems can also go to the my samples section and view the samples submitted by their water system or on their behalf by their water testing laboratory. These are just some of the many benefits of using the portal!

How to get started:

1. Head to www.wqcdcompliance.com/login to create an account.
2. Email us and request permission for your organization.
3. View our YouTube videos to become familiar navigating the site at www.youtube.com/user/wqcdcompliance.

Other tips and tricks:

1. When setting up your security questions, make sure you keep track of your answers. You will need these to submit files to the portal. Answers must be four characters or more and are case sensitive.
2. When submitting files, remember it is a two-step process. First, you upload the file to the website, similar to attaching a file to an email. Second, you have to officially submit it, just like sending the email. This allows users to view exactly what will be submitted to the state, correct any errors and ensure against unintended submissions.
3. We are only a phone call away. Get in touch if you are encountering any problems or need help at any time. Reach us at kaleb.winisko@state.co.us, (303)691-7803 or whitney.walker@state.co.us, (303)691-7809.

Happy portal-ing!

Aqua Man

Fires, droughts and floods

by David Dani, local assistance unit

Summertime is finally here! Normally that means sipping a cool glass of lemonade and watering your lawn, but not too much water. Originally, I was going to write about water conservation measures utilities can promote to combat summer drought. Maybe even a few best practices for utilities to reduce wildfire risk. With the weather this spring, I don't know which threat to focus on: floods, tornadoes, landslides, droughts or fires. Instead of choosing one, I'll write about a new resource to help you with any of them.

The Environmental Protection Agency developed a series of rip and run incident checklists to help water and wastewater utilities with emergency preparedness, response and recovery actions. These incident checklists cover many emergency situations including wildfire, flooding and drought. Checklists can be customized to fit your utility and then added to your emergency response plan. Each checklist provides links to additional resources to assist with the incident.

To access checklists, visit http://water.epa.gov/infrastructure/watersecurity/emerplan/ and scroll to the water sector incident action checklists under the preparedness planning section. You can also access checklists from the CoWARN website at www.cowarn.org under the related links tab. Look for EPA emergency planning, response and recovery resources.

Safety tips: Landslides

By Kaitlyn Minich, local assistance unit

The heavy spring rain brought the always needed moisture to the Front Range, and possibly landslides. Some early warning signs include:

- New cracks or unusual bulges in the ground, pavement or sidewalk.
- Broken water lines.
- Sudden changes in creek water levels.

In general, it is a good idea to not build near steep slopes, close to mountain edges or near drainage ways. However, if construction has already been completed in these areas, some effective mitigation strategies that can be implemented:

- Cut back the slope to reduce its gradient. Vegetation can be used as cover for a more natural look and additional erosion control.
- Install steel bars, also known as soil nails, to reinforce slopes.
- Support slopes with retaining structures.
- Install catchment basins and ring nets to prevent debris from affecting facilities.

Revisions to Regulation 100

by Jackie Whelan, facility operators

On June 30, 2015 the Water and Wastewater Facility Operators Certification Board approved changes to Water and Wastewater Facility Operators Certification Requirements, Regulation 100.

The board added the definition for owner. Not all suppliers of water, permittees and co-permittees are the owners of the physical facilities. Defining *owner* clarifies who is responsible for ensuring the facility is under the direct supervision of a certified operator in responsible charge when it is operating as required by Section 100.18.1.

For clarification, the board changed the title and provisions of several sections to clearly reflect the two-step process of certification. First, to apply to sit for a certification examination and second, to the process for issuing the certificate. For transparency, the board added requirements to comply with Section 24-76.5-101 et seq., C.R.S., often referred to as the lawful presence legislation when applying for new or renewed certificates.

The board included in the list of certified operator duties the requirement to act in a professional manner. The board made this addition to clarify expectations for certified operator's obligation to uphold the integrity of the certified water profession while acting in such capacity.

The board removed several items from the certified operator in responsible charge duties including the management, administration, compliance with regulatory and permit requirements, and other responsibilities that require decision-maker action and approval, such as providing operational, technical and financial resources necessary for proper operation and maintenance of the water or wastewater facility. These responsibilities are implicitly and explicitly identified in other applicable regulatory and permit requirements as belonging to the owner of the facility. The board wanted it clearly understood that the certified operator in responsible charge working with the resources provided by the owner and further that the certified operator in responsible charge is responsible for the professional operation and maintenance of the facility (as appropriate to their certification level).

These changes will be effective on August 30, 2015

Visit us on the web

Follow safe drinking water program on Twitter!
twitter.com/WQCD_Colorado

The Water Quality Control Division's home page web address is
www.colorado.gov/cdphe/wqcd

For training opportunities, please visit the division's website at
www.colorado.gov/cdphe/dwtraining.com

To access Aqua Talk online, go to
www.colorado.gov/cdphe/aquatalk.com

To access inspection services go to:
www.colorado.gov/cdphe/wqinspectionservices

To access the contact list for drinking water regulations go to
www.colorado.gov/cdphe/wqcd

Aqua Talk

Newsletter Information

Editorial team: Ron Falco, Jacki Main, Armando Herald, Kaitlyn Minich, Doug Camrud, Kelly Jacques, Corrina Quintana.

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

UNSUBSCRIBE: if you would like to stop receiving this newsletter, please contact us at 303-692-3665.

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Editor: Jacki Main

Purpose: to communicate division drinking water-related issues to stakeholders.