Aqua Talk

a safe drinking water newsletter

COLORADO
Water Quality Control Division
Department of Public Health & Environment

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IN THIS ISSUE

REGULARS

Policy 4 - Regulatory sampling requirement dropped

by Tyson Ingels, lead drinking water engineer

In October 2010, the Safe Drinking Water Program originally published Policy 4 after an extensive, multi-year effort working with stakeholders. Policy 4 memorializes three primary concepts.

Concept one

The program uses the 1991 USEPA Surface Water Treatment Rule guidance manual to determine compliance with the Colorado Primary Drinking Water Regulations (Regulation 11) at surface water treatment plants. Policy 4 establishes that the program use the 1991 EPA guidance to both assign pathogen (Giardia and virus) removal credits for surface water treatment plants as well as require water utilities to continuously achieve the required amount of disinfection (log-inactivation of viruses and Giardia). Per Regulation 11, the particle removal process is assessed for compliance through turbidity performance. The disinfection process is evaluated on a case-by-case basis in order to verify that each water utility achieves disinfection and correctly reports to the program.

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Storage tank inspection safety

by Ron Falco, P.E., safe drinking water program manager

Colorado's storage tank rule went into effect on April 1, 2016. The storage tank rule developed in response to the 2008 salmonella outbreak in Alamosa involved considerable stakeholder outreach, meetings and involvement that took place in 2014. The final rule approved by the Water Quality Control Commission in 2015 enjoyed considerable stakeholder support. In a nutshell, the rule requires public drinking water systems to develop and execute a written plan for inspecting their finished water storage tanks. The types of inspections considered include quarterly inspections and comprehensive inspections done every five years. Alternative schedules can be used with appropriate justification. The rule also requires documenting and fixing problems detected during inspections. The division is developing policies and guidance to help with implementation regarding inspection methods and alternative inspection schedules.

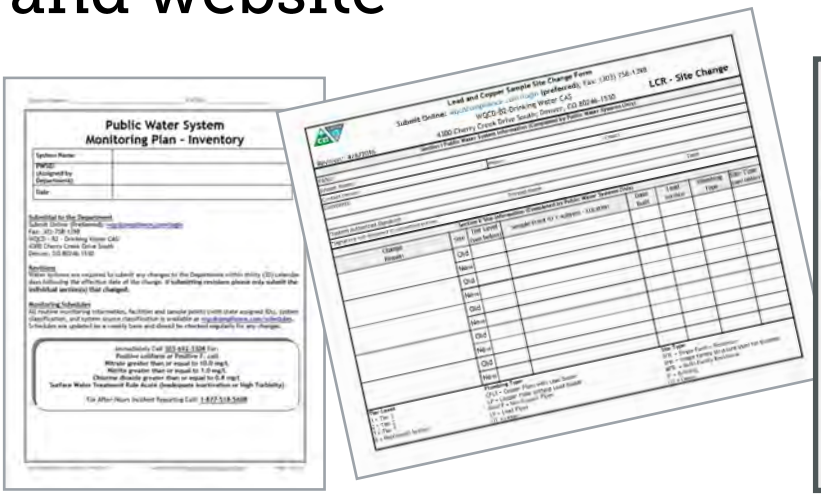
I want to take this opportunity to underline the importance of safety with regard to this rule. Inspecting storage tanks can be very dangerous. Storage tanks are often elevated far above ground. The inside of a storage tank might also be a confined space. People have died inspecting storage tanks. We do not want anyone to be injured or killed inspecting a storage tank. It is not our expectation that public water system staff or operators will jeopardize their health and safety to undertake a storage tank inspection. We do not have statutory or regulatory authority to define and enforce safety practices involved with storage tank inspections. The storage tank rule allows public drinking water systems to determine the best methods to inspect their tanks and identify the personnel qualifications needed to perform the inspections. We recommend that safety be a primary consideration as water systems develop their storage tank inspection plan.

We realize that some public drinking water systems may struggle to complete all the elements of an inspection each quarter, especially if those elements require climbing the tank. We are open to reasonable alternative scheduling for those elements. Similarly, reasonable alternative scheduling can be used for the more difficult or expensive elements of comprehensive inspections. However, never inspecting storage tanks is something we cannot not agree to. There is simply no argument, financial or otherwise that will persuade us that never inspecting

tanks or fixing identified problems is an acceptable long-term practice for a public drinking water system. We believe that the rule struck a fair balance and we intend to implement it in a fair manner.

To be clear, we would rather see a violation of the rule instead of someone taking chances with their health and safety. Rule violations involve public notice and the need to address the violations, but that is the preferred path compared to putting your health and safety at risk. As we implement this rule and work with water systems through the various issues, we will keep you updated. I encourage you to attend or call into Water Utility Council meetings, or at least, read the meeting notes for regular updates on these and other items of interest. Thank you!

Updated monitoring plan templates and website



by Haley Orahood, drinking water compliance assurance

All public drinking water systems must develop and maintain a monitoring plan to ensure water quality monitoring is consistently performed in accordance with the requirements of the Colorado Primary Drinking Water Regulations. Monitoring plans must contain:

1. System summary, including contact information for water system representatives and the total population served by the system.
2. Water source details.
3. Water treatment details.
4. Distribution system details.
5. Individual rule sampling plans.

Based on recent revisions to the regulations and input from public water systems, the monitoring plan templates and website have been updated.

These templates are available on our website at www.colorado.gov/cdphe/monitoringplans. Instead of one monitoring plan document, it has been divided into smaller, more manageable sections. A table is provided online, specifying what sections of the monitoring plan need to be completed based on water system classification and water source type.

The updated monitoring plan templates are intended to be user friendly, allowing water systems to easily identify and complete required sections, while enabling us to quickly make system updates in the drinking water database (SDWIS).

When submitting revisions, the water system should submit only the individual plan section(s) that has updates or changes, as opposed to submitting the entire monitoring plan.

These changes are the result of an ongoing effort to continuously improve the guidance, forms, and templates available to public water systems and operators.

Updates and changes

- The population form was modified and now includes a calculation worksheet to assist with calculating the total population (residents, non-transients and transients) served by the water system on the busiest 60 days of the year.
- The individual rule sampling plan section was split into individual PDF forms by rule (e.g., revised total coliform rule, lead and copper rule, etc.), and has been updated based on revisions and changes to Regulation 11. Water systems can now submit individual rule-specific updates or sample site changes.
- Total coliform rule language that is no longer applicable as a result of the revised total coliform rule has been removed.
- Additional lead and copper rule documents, including the lead and copper materials evaluation summary form and lead and copper sample site pool location details form, are required to be submitted and maintained as part of the monitoring plan.

More information

colorado.gov/cdphe/drinking-water-training-opportunities

303-692-3556

Unregulated contaminants

by Ron Falco, P.E., safe drinking water program

In the 1996 Safe Drinking Water Act reauthorization, Congress required EPA to test the nation's drinking water for unregulated contaminants to determine if those contaminants should be regulated to protect public health. Approximately every five years, EPA develops a list of thirty contaminants to be tested. The fourth version of this Unregulated Contaminant Monitoring Rule (UCMR4) was published in December 2016. The UCMR4 includes 10 cyanotoxins typically associated with harmful algae blooms and 20 chemicals including a variety of metals, pesticides, disinfection byproducts and organics.

All large systems serving more than 10,000 people are required to conduct this testing, and EPA randomly selects 800 small systems across the nation to participate. This link provides all the needed regulatory information: www.epa.gov/dwucmr/fourth-unregulated-contaminant-monitoring-rule .

EPA directly implements UCMR4 with some help from states. The sampling will take place between 2018 and 2020. Colorado is helping with this rule by coordinating with EPA on inventory information for public drinking water systems. Additionally, Colorado notifies the small systems selected to participate and conducts sampling for them while EPA covers their sampling costs.

The Safe Drinking Water Act requires that UCMR4 results are provided to the public via Consumer Confidence Reports (CCR). However this testing takes place over multiple years and typically is not considered final until well after all testing is complete, in this case 2020. During EPA's recent UCMR4 webinar, EPA clarified that results need to be included in the CCR for the next year after detections.

However, will waiting this long meet your customer expectations? Again, we recommend and encourage planning for how your system would respond to such a circumstance. All UCMR4 sampling results will be available to the public on EPA's website. We will remain strongly engaged with participating water systems and EPA throughout this process as our resources permit.

Planning ahead

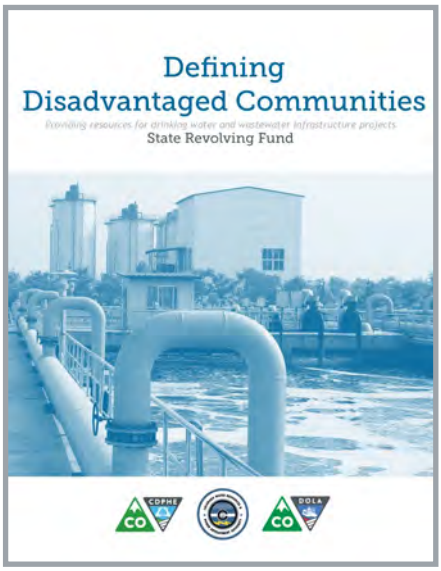
If your water system will sample under UCMR4, we strongly recommend that you plan ahead.

At a minimum we recommend:

- Become familiar with contaminants on the list.
- Understand how sampling requirements apply to your water system with respect to:
  - Schedule.
  - Sampling methods.
  - Sampling parameters, for example groundwater systems will not be required to sample for cyanotoxins.
  - Look into any history with these contaminants at your water system or in the watershed.
  - Be familiar with the health risk levels and health advisories for these contaminants.
  - Make sure you have a plan to receive results from the laboratory and evaluate the results.

Understanding the definition of disadvantaged communities

by Corrina Quintana, grants and loans unit manager



In January 2017 after an extensive public stakeholder process, the State Revolving Fund (SRF) Program introduced a new methodology for determining the status of a disadvantaged community (DAC). The EPA implemented the Water Resource Reform and Development Act of 2014, which required states to use specific metrics when examining communities for affordability. For Colorado, this meant redefining how disadvantaged community is determined. The new system considers additional factors beyond the mean household income (MHI) analysis.

Overview

Historically, in order to be considered a DAC in the SRF loan program, a borrower would have a population 10,000 or less and a MHI less than 80 percent of the state average as determined by the American Community Survey (ACS) data. Now, additional economic metrics, such as unemployment rates or job loss, are used to meet new federal SRF program mandates and to provide communities with additional criteria that might be more reflective of their current economic condition.

DAC designation benefits

- Entities categorized as disadvantaged through the SRF program are eligible for $10,000 in planning grants and up to $250,000 in design and engineering grants based on project scope.
- DAC eligibility provides subsidized interest rates which often makes a project more affordable.
- DACs may obtain direct loans at zero or one percent interest for loans up to $2.5 million with a loan term up to 30 years.
  - For example, a one million dollar project at zero percent interest saves the community $218,224 in interest over 20 years compared to a two percent loan.

More information

303-692-3653 - CDPHE, grants and loans
303-864-7736 - DOLA, Barry Cress

2017 SRF Intended Use Plan - www.colorado.gov/cdphe/wq-eligibility-survey

Defining disadvantaged communities - www.colorado.gov/cdphe/wq-general-srf-information

Department of Local Affairs - www.colorado.gov/pacific/dola/water-wastewater-management

Colorado design criteria potable water systems

In the last issue of Aquatalk, we announced that we are updating the 2013 Design Criteria for Potable Water Systems (design criteria) during the summer of 2017. The project is currently being scoped and staff are being assigned to it.

The project will kick off in May or June and we will hold statewide stakeholder meetings to discuss the scope of the project and interest in topic specific breakout teams. As the project begins, we will send an email with more information.

Topics that will be covered in the revisions:

- Lead and copper: special evaluations, corrosion control studies, etc.
- ANSI/NSF 61 and food grade issues.
- Grandfathering and new system TMF reviews.
- Construction certification form requirements.
- Other minor changes and stakeholder concerns.

Stay tuned at www.colorado.gov/cdphe/wq-design-criteria-potable-water-systems-policies

Regulatory requirement dropped

(Cover story—continued from page 1)

Concept two

Proper operations as a regulatory term is further defined in the guidance document for Policy 4. Every surface water plant is assessed for proper operations during each sanitary survey.

Concept three

The traditional surface water Microscopic Particulate Analysis (MPA), originally used to measure compliance with the surface water treatment rule, is used in a non-regulatory assessment. Policy 4 states: "The results of MPA tests are to be used to help assess treatment system microbiological contaminant removal effectiveness and this assessment is to be used to help prioritize scheduling of the treatment element of sanitary surveys for public water systems that treat surface water."

The program made several key changes to the MPA collection requirements in the years since adoption of Policy 4. Key changes including:

- Ceasing to require MPAs for membrane, cartridge, or bag filtration water plants.
- Changing the MPA collection date from alternating quarters to an assigned month of each year.

The intent was to use at least three years of data for each conventional and direct filtration plant to evaluate the value of collecting MPAs from surface water treatment plants by comparing MPA results with actual plant performance of the same period.

Due to staff turnover and logistical issues, the program began the "assigned-month" method of MPA collection in 2014. As of November, 2016, three years of data from each conventional and direct surface water treatment plant has been collected. We used this data to evaluate the use of MPAs and decide the value of the measurement.

We collected 364 sets of MPA tests (raw and finished water) from a total of 128 public water systems. Based on these data, 81 tests showed removal of less than 2.0 log (99 percent) for the water plant. Generally, removal of pathogens at less than 99 percent is considered a poor performing plant. The 81 "poor" tests were from these 20 public water systems. It is important to note that many of the poor results had low raw water particle counts, so that the low removal numbers were likely a function of very little material in the raw water. The MPA does not measure actual pathogen removal, but rather attempts to measure pathogen surrogate removal.

In order to assess whether the testing provides insight into prioritizing sanitary surveys, we researched several topics about specific MPA test results:

1. Was the significance model used by the labs? The significance model is an alternative qualifier agreed to in 2012 that would put context to the MPA.
2. Were there other reported problems at the water plant during the time of the MPA test?
3. Does the most recent sanitary survey identify any issues with the water system?

In addition to trying to answer the previous questions, we gathered specific data on raw water particle counts versus finished water particle counts, and

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Assistance opportunity

by David Pier

Are you a water system with infrastructure deficiencies or regulatory compliance issues? The Community Engineering Corps (CECorps) may be able to help. The American Water Works Association, in association with the American Society of Civil Engineers, and Engineers Without Borders USA, developed this program to assist underserved communities to meet their infrastructure needs and improve community members' quality of life.

The mission is to bring together underserved communities and volunteer engineering leaders to advance local infrastructure solutions. CECorps works with communities that do not have the financial resources to hire engineers. Communities that need engineering assistance but cannot afford those services can apply.

Since the program launch in February 2014, CECorps has worked with approximately 50 communities. More than 30 projects are currently in varying stages of progress, several of these communities were first introduced to CECorps through their state agency.

Systems eligible for CECorps support*:

- Publicly owned water systems.
- Non-transient community systems (based on economic status).
- Non-Profit water systems.

*see other eligibility requirements online at www.communityengineeringcorps.org/apply-start-project

Community ENGINEERING CORPS®

Assistance may include planning and engineering services:

- Assistance with funding applications, organizational and management improvements.
- Development of technical studies, conceptual and final design documents for construction.
- Assistance with permit applications.
- Mentoring and coaching with consultant or contractor management.
- Conducting value engineering for existing project.

CONTACT

www.communityengineeringcorps.org

Lindsey Geiger | lgeiger@awwa.org

Dave Pier | dpier@carollo.com

Cover story (Continued from page 6)

researched the specific finished water turbidities that occurred during the testing period. **The resulting research indicated no meaningful correlation between MPA results and plant performance issues.** Raw water particle counts indicating poor performance ranged from 140,000 to over 400 million. Finished water particle counts ranged from 43 to over 21 million. At one utility, finished water particle counts in the millions corresponded to a turbidity of 0.26 NTU whereas at another facility, similar particle counts corresponded to a turbidity of 0.08 NTU.

We concluded that significant additional research would be required to better understand each situation where the MPA is indicating a large presence of particles in the filtered water. We also concluded that prioritizing sanitary surveys based on MPA results is not appropriate without investing significantly more research into the meaning of the MPA results. After evaluating available resources and considering the above determinations, we ceased requiring water utilities to perform MPA testing annually.

We continue to agree with water systems that this testing provides significant value in performing optimization activities and can be instrumental for water operators to understand filter performance better. We encourage water systems to continue optimizing water plants which includes characterizing their filter performance for the purpose of achieving further optimization through their particle removal processes.

Errors on compliance monitoring and reporting

by Jackie Whelan, liaison to operator certification board

Recently, there have been several instances of significant errors by certified operators who accepted the responsibility for compliance monitoring and reporting. These errors include:

- Identifying a sample as a process control sample when it was a compliance sample instead.
- Cherry picking results - choosing the best result to report.
- Dry lab/pencil whipping results - Recording a result when no sample was taken or altering a reported or logged result.
- Falsification of sample results.

These errors result in serious consequences ranging from operational errors due to bad information to reduced protection of public health. The following discussion of errors may help you stay in the right. In the case of the cherry picking example below, the consequences also included revoking an operator's certification.

Compliance samples

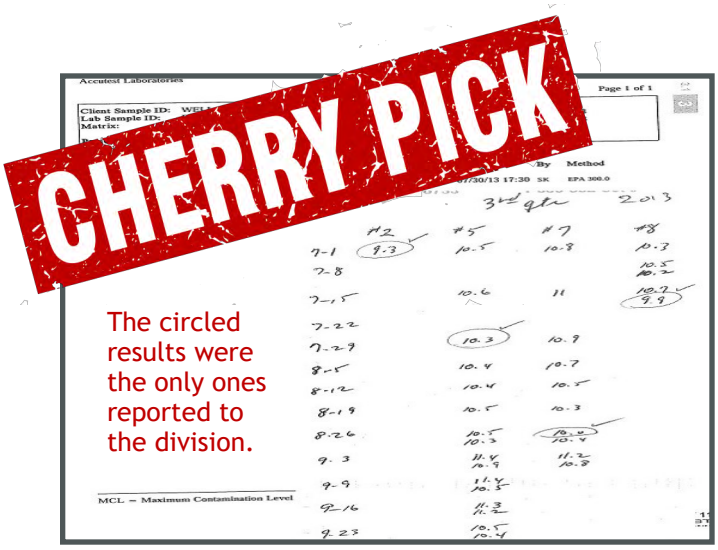
Characterized by three things:

1. Type - such as grab or composite.
2. Location - for example, after all treatment and at the entry point to the distribution system or at the point of discharge.
3. Analytical method used - a drinking water certified laboratory, a laboratory using approved wastewater analytical methods or by other approved methods.

Each system or facility has unique points of compliance defined in their monitoring schedule or permit. Permits and monitoring schedules identify the minimum number of samples required to be taken for compliance. If more than the minimum number of samples are taken at a point of compliance, they must be reported as compliance samples.

Field or process control samples

These are samples or readings taken to assist the operator in responsible charge with decision making in the course of operating a facility, but that don't meet the required type, location or analytical method for a compliance sample. These samples are not required monitoring for compliance determination. Some examples of field or process control samples include jar testing, using a handheld nitrate meter or pH test strips.



Cherry picking

In 2014, the department issued an enforcement order against the City of Burlington. The city collected hundreds more nitrate samples than required by their monitoring schedule. The city only reported the minimum required and always reported the best result for each compliance point. The enforcement order cited the city with over 2,100 violations in a five year period for:

- Failure to report the results of all nitrate samples collected.
- Over 200 nitrate maximum contaminant level violations for samples greater than ten mg/L.
- Failure to collect confirmation samples.
- Failure to notify the department of the nitrate violations.
- Failure to notify the department of sampling violations.
- Failure to issue required public notification.
- Failure to include required information in annual Consumer Confidence Reports.

The city's operation logs indicate the wells were operating at the time all samples were collected. The city maintained handwritten records showing cherry picking. The city instructed the laboratory, in writing, not to submit nitrate results to CDPHE and the laboratory clearly identified (to the city) sample results that exceeded the maximum contaminant level.

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Operator certification violations

Drinking water certifications

TREATMENT CERTIFICATIONS
A, B, C and D
(A is the highest level).

DISTRIBUTION CERTIFICATIONS
1, 2, 3 and 4
(4 is the highest level).

SMALL SYSTEM (SS)
Applicable to systems that serve less than 3,300 people.

by Alex Hawley, drinking water compliance assurance

In Colorado, all public water systems are required to be under the supervision of a certified operator in responsible charge to ensure proper operation and maintenance of a water system. Each public water system is assigned a classification to determine what level of operator is required to oversee the system. This classification is determined through the specific design procedures and the type of population served. The water system classification for each individual public water system can be located on the monitoring schedule found here (wqcdcompliance.com/schedules).

Any facility operated without a certified operator is in violation. When an operator certification violation is issued, the public water system is required to correct the violation by obtaining a certified operator and is also required to distribute Tier 2 public notice to all consumers. A Tier 2 public notice indicates to the public that the violation can lead to potential adverse impacts on human health as the system is not being overseen by trained personnel. Tier 2 public notice must be provided to the public within 30 days of the violation issue date. Use our form to update the certified operator for a system www.colorado.gov/cdphe/monitoringplans. The form should be submitted through our online portal (wqcdcompliance.com/login).

Since 2015, we have issued 166 operator certification violations. 65 percent of the violations were issued to community water systems while the remaining 35 percent were issued to community water systems. Currently 74 percent of violations have returned to compliance. If a system remains out of compliance for an extended period of time, the system may be issued an enforcement order which has associated monetary penalties.

PLEASE NOTE!

Clorox bleach is not NSF 60 certified. To allow systems time to change products, we will make note if Clorox is used during inspections this summer. Systems should begin planning to change bleach products. Be sure to read the next issue issue of Aquatalk for an in-depth explanation and/or visit our website colorado.gov/cdphe/drinking-water-sanitary-surveys.

Seasonal water systems

by Tom Valenta, local assistance

With summer just around the corner, many people are planning and finalizing their vacation plans. That is no different than the businesses, campgrounds, ranches, RV parks etc. that cater to people who take advantage of what Colorado has to offer. However, one part of planning that these seasonal systems may overlook is if their drinking water is safe for the public to consume. Many of these water systems are shut down for extended time periods which can introduce an avenue for contaminates to enter the drinking water system. That is why last year, as part of the Revised Total Coliform Rule, suppliers that operate as a public water system only certain times of the year are required to comply with the start-up requirements for seasonal systems which can be found in Regulation 11, Section 11.16.

The state has 445 water systems that operate seasonally. Last year, 82 violations were issued. That is roughly 1 in 5 seasonal water systems that received a violation. Violations range from not submitting certification that the seasonal start-up procedure was completed to not even conducting a start-up. Don't let this happen to you!

How do I know if I'm a seasonal system?

First, check your drinking water monitoring schedule (https://wqcdcompliance.com/schedules) to see if you are a seasonal system. Along with that, check your Total Coliform Bacteria (TCR) sample schedule for your operating timeframe. For example; a seasonal campground plans to be open by Memorial Weekend (May 29) their TCR sample schedule will show May 1, 2017 as the beginning of their collection period.

Seasonal water system requirements

The supplier must either complete the department's pre-approved start-up procedures in the Revised Total Coliform Rule Start-up Procedures for Seasonal Systems Handbook, or complete their own department-reviewed and approved start-up procedures prior to supplying water to the public. For hand-pumped systems, please refer to the department's Monitoring and Operational Guidance Handbook for Colorado Public Water Systems Utilizing Hand -Pumped Wells Which Do Not Provide Continuous Disinfection, or submit start-up procedures for department approval. You can find these handbooks and other useful information from the Water Quality Control Division by visiting colorado.gov/cdphe/wqcd and searching for

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Seasonal systems handbook or hand-pumped wells operational guidance and handbook.

Please note that as part of the start-up procedure a "special purpose" total coliform sample must taken within the distribution before supplying water to the public. Guidance, forms and templates can be located at colorado.gov/cdphe/wqcdcompliance.

Once the start-up procedure is completed and the pre-opening total coliform sample is absent the supplier has ten days of the following month, as outlined in the system's monitoring schedule, to submit the certification of completion of start-up procedures (via the drinking water portal at wqcdcompliance.com/login). Please hold onto the completed seasonal system start-up log and the "special purpose" total coliform results, these will be reviewed during the system's sanitary survey.

Let's look back at the example of the seasonal campground water system that opened up for Memorial Day weekend and what they need to do:

- First, they need to follow and complete an approved start-up procedure and collect a "special purpose" bacteriological sample prior to opening the water system to the public.
- Once open, they need to collect a second bacteriological sample to comply with their routine TCR for the month of May.
- Finally, the system also needs to submit the Certification of Completion of Start-up Procedures by June 10.

Have a great and safe Colorado summer!

Annual backflow prevention and cross-connection control reports

by Jorge Delgado, senior field engineer

Extreme weather events and other disasters can quickly Section 11.39 of Regulation 11 requires suppliers create a report to demonstrate compliance with the Backflow Prevention and Cross-connection Control Rule. This rule report summarizes the performance of the public water system's (supplier) program. Beginning in 2017, the supplier must develop a written program report for the previous calendar year and for each calendar year thereafter. The report must be complete by May 1 of the following year and the supplier needs to keep a record of the report for department review. This means that suppliers need to complete their 2016 annual report by May 1, 2017.

Once your annual report is complete, how do you submit it? Good news! Suppliers are not required to be submit the report to the department unless a violation is identified. We intend to review annual report(s) during normally scheduled sanitary surveys. However, regulations do allow us to request a copy of the report(s) at any time so suppliers are still required to meet the May 1 deadline every year.

If a backflow prevention/cross connection violation occurs, Regulation 11.39(7) requires that any violation must be reported to the department no later than 48 hours after the violation occurred. In accordance with Regulation 11.36(2)(b), we request that the supplier submit a copy of the annual report documenting the identified violation. The annual report should be submitted via the drinking water portal at wqcdcompliance.com/login. Please mark it to the attention of the WQCD Backflow Prevention and Cross-connection Control Specialist.

For more information

Jorge Delgado, senior field engineer
303-692-3511 | jorge.a.delgado@state.co.us.

Guidance document with sample calculations can be found here: www.colorado.gov/cdphe/drinking-water-cross-connection-control-program.

Asset management can benefit your system

by Environmental finance center

As a water or wastewater system manager or operator, you are managing assets every day. You have to make decisions on what maintenance to perform on pumps, wells, treatment facilities or any other assets. You have to decide what to do when an asset fails – repair it, replace it or rehabilitate it. You have to make decisions regarding what spare parts to have on hand. The question is, are you making well informed, data-driven decisions that are the most effective and efficient for your utility? Implementing an asset management program will help you run your systems in a better, more informed way.

Asset management has five core components. They are simple concepts that are probably practiced at some level already, but likely aren't organized into a strategic process that aids in decision making.

Five components of asset management

1. Current state of the assets: What do you own and what are the characteristics?
2. Level of service: What do you want your assets to do?
3. Asset risk: Which assets would be critical to providing whatever it is you want to do?
4. Life cycle costs: How would you operate, maintain, repair, rehabilitate or replace your assets to make sure they keep providing what you want?
5. Long-term funding: How will you pay for what you want to do with your assets?

Asset management shifts the focus to controlling risks and proactively addressing concerns rather than reacting to every problem. It is much more cost effective to prevent a high risk asset from failing than it is to let the asset fail and deal with all the consequences that occur after the failure. Asset management also helps utilities identify which portion of the system actually requires replacement and which portions can remain in place. This analysis is vital given that industry simply cannot afford to replace its entire aging infrastructure.

An asset management program can pay for itself in many ways: deferral of capital investment, avoiding catastrophic failure, reduction in lost revenues due to reduction of lost water, reduction in bonds and debt. A 2013 survey completed by McGraw Hill Construction on the benefits of asset management reported the following: Improved ability to explain budgets, better focus on priorities, better understanding of risks, increased ability to minimize costs, reduced costs without sacrificing service levels. The more you do with asset management the more benefits you receive, doing even a little bit will improve your system.

You are likely doing some asset management already. You can easily determine where your practice currently stands to help focus on the most appropriate next steps by using the Asset Management IQ tool developed by the Southwest Environmental Finance Center. The tool is available for your use at no cost and can be found at southwestefc.unm.edu/AssetManagementIQ/ .

Ask Aqua Man

Dear Aqua Man,

I am the operator for a couple of drinking water systems. Is there a quick and easy way to find out who I need to talk to for each of my systems since it may periodically change?

Also, is there a way to find out what labs are current on their certification? More specifically, is there a way to know what analyses each of the labs are certified for?

When lab certifications expire, I have no way of knowing. Any help would be a big time-saver for me.

Much appreciation,

Ed C. Lent (Operator)

Dear Ed C. Lent,

2017 has certainly brought positive change for the Water Quality Control Division and I'm excited to provide an update. First, instead of having water systems within in the same county talk to different compliance specialists based on system type (community, non-transient non-community, and transient), now all systems within any given county will talk to the same compliance specialist.

To avoid confusion in determining who you need to call, we have implemented a new tool on our website that indicates who your compliance specialist is by merely selecting the source water type and county in which the water system is located! You can access this at www.colorado.gov/cdphe/dwcontact.

In addition, our website now contains an updated list of laboratories throughout the state and shows which parameters they are certified to test. This list can be accessed at www.colorado.gov/cdphe/dwlabs. The list also displays the expiration date for each specific certification that each lab holds. This should ease the burden for operators wanting to know that the lab they use holds current certifications for what they need. You can even search for labs that are open on Saturdays.

As always, if you need further assistance with compliance, we are only a phone call away! Our main line for drinking water compliance assurance is 303-692-3556.

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?

- email: cdphe.wqdwtraining@state.co.us
- phone: 303-692-3619
- fax: 303-782-0390
- mail: WQCD, 4300 Cherry Creek Drive South, Denver, CO 80247

... Continued

Reporting errors (Continued from page 8)

Inappropriate rounding

For example, your facility's parameter limit is 1. The meter is reporting 1.52 and the result is recorded as 1. Always record the actual meter reading or analytical result, not a rounded value.

Dry lab/pencil whipping

Recording or reporting a result when the sample wasn't taken or altering a reported or logged result.

If you have questions about reporting, please refer to the DMR Guidance at www.colorado.gov/cdphe/wq-guidance or contact your system or facility's compliance specialist.

Test your knowledge

Think you know everything about drinking water? Prove your drinking water knowledge with our interactive quiz.

Please go to the online quiz at online to record your answers. Answers will appear in the next issue.

Enjoy!

1. Are a nitrate and nitrite sample required as part of the seasonal system start-up procedure?
   a. Yes.
   b. No.
2. True or False: Systems need to check their nitrate and nitrite sampling schedules and collect during their seasonal operating period.
   a. True.
   b. False.
3. What are some benefits of asset management programs?
   a. Reduced regulatory requirements.
   b. Free stuff from CDPHE.
   c. Improved ability to explain budgets and minimize costs.
   d. Ability to make more informed choices about your system.
   e. Both C and D.
4. True or False: Suppliers must send in the their backflow and cross-connection annual report if a violation is identified in the report or if the department asks for a copy.
   a. True.
   b. False.
5. Why is the WQCD ceasing to require surface water systems to do the Microscopic Particulate Analysis?
   a. No labs perform the test anymore.
   b. Too time consuming.
   c. Water systems asked for us to stop.
   d. Data analysis showed ambiguity in the data.
6. When will the design criteria be updated again?
   a. 2018.
   b. 2019.
   c. Never, not needed.
   d. 2017.
7. Name the three components that define compliance samples.

Answers to the winter 2017 drinking water quiz

1. How far should the vent opening be above the annual average snow depth? (b. 24 inches)
   a. 36 inches.
   b. 24 inches.
   c. 12 inches.
   d. 18 inches.
2. True or False: Suppliers must report E. coli samples as most probable number or colony-forming units. (a. True)
   a. True.
   b. False.
3. What's one thing water utilities can do to help prepare for an emergency? (d. All of the above)
   a. Develop an emergency response plan.
   b. Coordinate with local fire, police and emergency services providers.
   c. Join the Colorado Water/ Wastewater Agency Response network.
   d. All of the above.
4. True or False: The EPA clarified that the State Revolving Fund may provide funds for complete service line replacement of lead and non--lead pipes. (a. True)
   a. True.
   b. False.
5. True or False: All compliance samples must be taken by a certified operator. (b. False)
   a. True.
   b. False.
6. True or False: If your monitoring schedule only requires one sample to be taken during the monitoring period, you only report one sample even if you took multiple samples during the monitoring period. (b. False)
   a. True.
   b. False.

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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

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

To access inspection services go to:
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To access the contact list for drinking water regulations go to:
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Aqua Talk

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