Aqua Talk

A newsletter from the Safe Drinking Water Program

Colorado Department of Public Health and Environment

Sanitary Survey: A Proactive Approach

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Winter 2013

by Cameron Wilkins, Field Services

Happy New Year to all! With the new year comes the possibility your system could be scheduled for a sanitary survey. We would like to take this opportunity to review the department's sanitary survey program by discussing the elements of a sanitary survey, the goal of a sanitary survey, who completes the sanitary surveys, how often a system should expect a sanitary survey and helpful resources to prepare for a sanitary survey.

A sanitary survey is an essential element of the Colorado Department of Public Health and Environment, Water Quality Control Division's safe drinking water program. A sanitary survey is the department's proactive approach to identifying and assisting water systems to collect deficiencies that could result in contamination of the public water supply and compromise public heath before such an occurrence materializes. The *Colorado Primary Drinking Water Regulations* (CPDWR) define a sanitary survey as an onsite review of the water source, facilities, equipment, operation and maintenance of a public water system for the propose of evaluating the adequacy of such source, facilities, equipment, operation and maintenance for producing and distributing safe drinking water.

The department's goals for the sanitary survey include:

- Identify and address significant deficiencies and violations of the CPDWRs
- Provide assistance to the system
- Ensure that the water treatment plan operates in accord with the department-approved design and conditions
- Produce consistent, reliable reports which correctly identify the compliance and technical issues at a facility
- Facilitate continuous improvement by:
  - Accurately capturing system inventory
  - Identifying system strengths
  - Providing resources to the system
- Establish working relationships between the department and the systems

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Message from the Safe Drinking Water Program Manager

Importance of Design Review and Conditions of Approval

by Ron Falco, Safe Drinking Water Program Manager

Hello,

As you know, it is a requirement of the *Colorado Primary Drinking Water Regulations* to gain approval from the Colorado Department of Public Health and Environment (department) prior to constructing new waterworks or making substantial modifications to existing waterworks. For community water systems, a professional engineer registered in the state of Colorado must prepare the design. Our design review decisions are based on the *State of Colorado Design Criteria for Potable Water Systems* (design criteria). The design review requirement is very important with respect to protecting public health. During sanitary surveys we sometimes find infrastructure that has been constructed without approval. Typically, there are problems with what has been done, and it is inevitably more expensive to correct the problems after the fact as compared to the cost of constructing properly in the first place.

Typically, when the department confirms that a proposed project meets the design criteria, we conditionally approve the project via a design approval letter. Maybe it has been a while since you reviewed the latest design approval documents, but it is important to remember that the conditions attached to the department approval must be met. The conditions attached to approval often mirror items found in the design documents. Common design approval conditions include:

1. Flow rates
2. Performance metrics including:
   - Differential pressure for cartridge/bag filter change out
   - Membrane integrity testing pass/fail
   - Continuous operation of coagulation
3. Hydraulic loading rates
4. Construction materials
5. Maintaining spare parts (chlorine pumps, etc)
6. Performing required operational practices to maintain the public health protection including:
   - Proper operational data monitoring and control
   - Instrument calibration

Additionally, for alternative filtration technologies there may be a condition specifying the effluent turbidity the system must achieve.

So it is very important to be aware of and ensure continued adherence to any conditions attached to a design approval. When we visit with you during sanitary surveys, we will be reviewing this element.

Our current design criteria were last updated in 1997. We are now in the midst of a stakeholder process to update the design criteria. Tyson Ingels, our lead drinking water engineer, heads up this effort. Tyson and the stakeholders have been working on the various chapters, and the revised criteria will be available in 2013.

Water utilities, professional engineers and the department make an effective team to ensure that drinking water infrastructure is designed, constructed, operated and maintained in a manner that ensures safe drinking water for the public at all times. Thank you. ♦

Sanitary Survey: A Proactive Approach

(Continued from page 1)

Article 11 of the CPDWRs requires routine sanitary surveys for all public water systems every three to five years. With approximately 2,050 public water systems in the state, there are approximately 650 sanitary surveys to be completed on an annual basis. The department has approximately 15 full time employees whose primary responsibilities include completing sanitary surveys and/or compliance evaluation inspections (clean water). Those 15 employees are tasked with completing approximately 530 sanitary surveys per year. The department also contracts with eleven local health departments who complete approximately 120 sanitary surveys on non-community groundwater systems.

In preparation for a sanitary survey, a system can go through the *Sanitary Survey Preparation Checklist* which should be provided to the system when the sanitary survey is scheduled. For small systems, the department's capacity building unit may contact you to offer a pre-sanitary survey site visit to assist you in preparing for the sanitary survey**.** Please see the related article on the bottom of page 9.To further prepare, a system could complete a self evaluation to ensure potential contaminant routes to finished water supplies are identified and resolved prior to the sanitary survey. Additionally, a system could review its records to ensure they are up-to-date and contain all documents as required by Section 1.6.3 of the CPDWR.

With all that said, we hope this article has enhanced your understanding of the sanitary survey program structure. Remember, we are all out there trying to ensure that safe drinking water is provided to all of Colorado. Thanks for the help and we'll see you in the field. ♦

Stakeholder Processes

Design Criteria Revisions

by Tyson Ingels, Engineering Section

In August 2012 the engineering section of the Water Quality Control Division held stakeholder meetings in Denver, Glenwood Springs and Pueblo to introduce the need to update the *State of Colorado Design Criteria for Potable Water Systems* and solicit feedback on the strategy to be employed in the review and update process. (See the fall 2012 issue of Aqua Talk for additional information.)

As a result of these stakeholder meetings, ten workgroups formed to review various chapters of the design criteria. Workgroups conference approximately every two weeks and are making significant strides to update design criteria. The Water Quality Control Division is keeping the review process on track for a June completion date.

A listing of work group participants, the 1997 design criteria document and comments received as a result of the meetings, can be found at the WQCD website under policies. ♦

Increased Readability Rulemaking

by Melissa Swerdlow, Policy and Planning Unit

In the fall issue of *Aqua Talk*, the policy and planning unit introduced the increased readability rulemaking. One of the main goals of this rulemaking is to reorganize, simplify and clarify the existing *Colorado Primary Drinking Water Regulations* (CPDWR). The final CPDWR increased readability rulemaking hearing has been moved to November 2013.

Our first stakeholder meeting was held on Oct 30. We received helpful comments and great feedback. For more information about this rulemaking, please visit our webpage. ♦

Using Emergency Sources for Drinking Water

by Jennifer Miller, Compliance Assurance Section Manager

The *Colorado Primary Drinking Water Regulations* (CPDWR) define an emergency source as a water facility that is only used as the result of extreme circumstances and is otherwise kept offline. This definition applies to sources that are either connected or disconnected from a treatment plant/distribution system. **Emergency sources should normally be out-of-service and should be used very rarely and only in true emergency situations.** Emergency sources should not be confused with interim or seasonal sources that are used intermittently or seasonally to meet high water demand, address recurring drought-related water supply issues or to maintain water rights. Sources used for these interim or seasonal purposes have formal availability designations of 'interim' or 'seasonal,' depending on the specific timing and duration of use for the sources. Public water systems communicate availability designations for all sources through completion and submittal of the *Drinking Water System Inventory Form*. This form is available on the department's website at www.colorado.gov/cdphe/wqcd, select "Forms, Applications and Templates" from the Quick Links box in the lower right corner of the page. Select "Drinking Water Monitoring Plant Templates" and look for the "Inventory Section Only" master template.

Emergency sources should normally be out-of-service and should be used very rarely and only in true emergency situations.

If a public water system (PWS) is experiencing an emergency situation and needs to begin temporary use of a source designated as 'emergency,' the department must be notified as soon as possible – preferably before the source is put into service - but no later than 24 hours after the source is put into service. During normal business hours, Monday through Friday, the drinking water compliance assistance line at 303-692-3556 can be used; outside of normal business hours and days, the emergency response line at 1-877-518-5608 should be used. At a minimum, nitrate and coliform sampling and analysis for the source will be required within two calendar days of the source being put into service. The department may also require sampling and analysis for other parameters, depending on specific risks for each situation.

If a PWS determines that the source will be used for longer than 30 days, the PWS must notify the department and submit an updated *Drinking Water System Inventory Form*, changing the availability designation for the source from 'emergency.' If sampling and analyses for all applicable parameters under the CPDWR have not been provided for that source, they may be required by the department as part of continued use of the source. The CPDWR requires that design approval be obtained from the department for all sources. If the source has not been approved by the department, obtaining that approval will also be required. Specific information regarding design approval can be found at http://www.colorado.gov/cs/Satellite/CDPHE-WQ/CBON/1251629028469, or by contacting the engineering section at 303-692-6298 or CDPHEWQEngInfo@state.co.us. The key to getting an emergency well activated quickly and in compliance with the CPDWR is timely communication with the department! ♦

Determining 4-log Treatment of Viruses

by Paul Kim, Engineering Review Unit

The water quality control commission amended the *Colorado Primary Drinking Water Regulations* (CPDWR) in 2010 to require that all the groundwater sources be disinfected at all times when used to serve water to the public, unless specifically waived from the disinfection requirements. Groundwater systems must use disinfection methods that are approved by the Water Quality Control Division (division). Groundwater source disinfection methods may include physical treatment methods but must include at least one chemical treatment method, such as sodium hypochlorite. In accordance with Article 13, Section 13.2(a)(2) of the CPDWR, the division considers proper disinfection as maintaining a residual disinfectant concentration at the entry points which cannot be below 0.2 mg/L for longer than a 72-hour period. In addition, to the minimum disinfection requirement, the division expects all groundwater systems to demonstrate the capability to achieve at least 4-log (99.99%) reduction/ inactivation of viruses before or at the first customer. This will ensure that groundwater systems that have fecally contaminated source waters provide treatment that reliably achieves at least 4-log treatment of viruses before or at the first customer if an alternate source water cannot be provided or if the system is unable to eliminate the source of contamination.

Using chlorine for 4-log treatment of viruses is based on the "CT" concept where "C" is the measured residual disinfectant concentration and "T" is the contact time between the point of application of the disinfectant and the point where the disinfection residual is measured. The point where the disinfection residual is measured must be before or at the first customer and after the contact time needed to achieve 4-log treatment. The contact time, "T" of the disinfectant is determined by dividing the total minimum operating volume of system components with the associated baffling factor for each component (pipe, storage tank), in gallons, by the peak hourly flow, in gallons per minute (gpm), of the system. Once "C" is measured and "T" is determined, the product C x T (CT_{calc}) is calculated to establish a contact time. After determining the CT_{calc} based on the system operating parameters and configuration, the appropriate EPA CT values are used to determine required 4-log inactivation of viruses. The EPA designates 4-log inactivation of viruses as $CT_{99.99}$ which is dependent on the type of disinfectant, coldest water temperature, and pH of the water. The EPA $CT_{99.99}$ values are based on experimental data, to account for the impact of major variables (e.g., temp, pH, concentration) on disinfection reaction efficiency, and can be found within the EPA Technical Guidance Manual for *LT1ESWTR Disinfection Profiling and Benchmarking.* Once the appropriate $CT_{99.99}$ value is chosen, the CT_{calc} will then be divided by the $CT_{99.99}$ value to determine the $CT_{required}$. The $CT_{required}$ value will then be multiplied by 4 to determine the 4-log reduction/ inactivation of viruses of the treatment system.

To assist with the log inactivation calculation, please review the division's guidance document titled *"Disinfection: CT and Microbial Log Inactivation Calculations,"* the online EPA Technical Guidance Manual for *LT1ESWTR Disinfection Profiling and Benchmarking*, and the online EPA profile calculator to assist with the calculations. The online EPA reference materials can be found at: http://water.epa.gov/lawsregs/rulesregs/sdwa/mdbp/lt1/lt1eswtr.cfm. For additional technical assistance, please contact the engineering review section at 303-692-6298.♦

Got Membranes?

by Serenity Valdez, Compliance Assurance Section

Do you operate a public water system that is subject to the surface water treatment rules of the *Colorado Primary Drinking Water Regulations*? Is your compliance filtration technology considered a membrane? If you answered yes to **both** questions, then your turbidity standards are changing on Jan 1, 2014. This change is being implemented in order to allow a reduction from daily direct integrity testing to weekly direct integrity testing.

Now is the time to check your turbidimeters, sampling locations and sampling procedures.

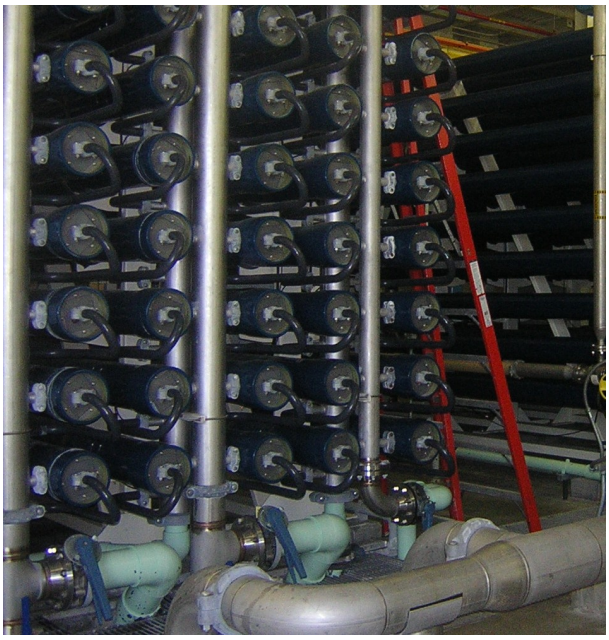
Alternative filtration is any filtration other than conventional, direct, slow sand and diatomaceous earth. For all alternative filtration used, the Water Quality Control Division is required to establish the turbidity standards for Colorado public water systems. In order to determine the turbidity standards, the environmental protection agency (EPA) requires the Water Quality Control Division (division) to evaluate all "alternative" filtration technologies for compliance with the total removal and inactivation requirements of the surface water treatment rules. After the division's evaluation, a formal acceptance letter is issued to the manufacturer and/or distributor of the technology. Based upon manufacturer documentation, best practices and regulatory guidance, all of the acceptance letters include a conditions of acceptance section. This section of each acceptance letter contains information about turbidity performance standards for the specific technology accepted for use in Colorado. Please contact Tyson Ingels at tyson.ingels@state.co.us or 303-692-3002, if you do not have a copy of the acceptance letter for your specific technology.

All membrane filtration technologies accepted for use in Colorado have been assigned the following turbidity performance standards:

- ≤0.1 NTU 95% of the time (monthly);
- ≤0.5 NTU maximum; and
- Weekly direct integrity testing.

Beginning on Jan 1, 2014, all public water systems that are utilizing membrane filtration technology must comply with the turbidity performance standards according to your technology's acceptance letter. These turbidity standards may be difficult to demonstrate on turbidimeters that are not capable of measuring to these lower levels.

Some public water systems may need to upgrade their equipment or relocate their sampling taps to ensure compliance by Jan 1, 2014. If you are unable to establish compliance with these turbidity standards, please contact Tyson Ingels at 303-692-3002 immediately to discuss your options. New monthly operating report forms will be sent to all affected public water systems during the fall of 2013. ♦



Membranes at the water treatment plant in Brighton.

Copper Mountain 2012 RMSAWWA/RMWEA Joint Annual Conference Offers Friendly Competition

OPERATION CHALLENGE DEMONSTRATION

by Dale Butler, *Rumbles*
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What started as a demonstration event put together by Stacey Walker turned into a full blown competition when the 'hosting' Littleton/Englewood team of 'Commode Commandos' were challenged by the Aurora 'Ascending Aerobes' AND a team of Engineering Allstars, 'The Fall Guys'. The Commode Commandos team with Chong Woo, Caleb Vannice, and Brian Pritekel, narrowly edged Aurora's Ascending Aerobes, with Kevin Amann, Brian Wyman, and Jason Lee. The winning time was 1:43 over 2nd place 2:15. The Fall Guys with Zach Collins, Will Raatz, and Ricky Clover, would have done much, much worse, but finished with a respectable 3:35 when Ricky was discovered to be an operator and not an engineer at all. As an additional incentive to see what the competition was like, Stacey also organized a competition to see who could cut through a piece of pipe the fastest. In this, 1st place went to John Chrestensen, in a time of 14 seconds, 2nd to RMSAWWA's very own Joe Cowan in 14.9 seconds and 3rd to Josh Meek. ♦

WATER TAPPING CONTEST

by Dale Butler, *Rumbles*
Reprinted by permission

Bobby Powell once again arranged for a spirited Tapping Contest. Unfortunately, Wednesday morning was the only glitch in what otherwise was terrific weather. A constant drizzle of rain made for a rather wet arena and when Bobby arranged to have a couple of pop-up tent awnings put up, the Code Inspection Officer for the Fire Department informed him he would have to have a minimum of 40 lbs on each leg. After a somewhat lengthy discussion, we were given permission to proceed since the rain was pretty much falling straight down and no high wind warnings were given as part of the forecast. All in all, the battle between the teams took center stage in an amazing display of strength and agility.

This year saw some great competition. The winning time was 1 minute 26.03 seconds turned in by the Colorado Springs Utilities Waterdogs with coach, Jeremy Luna; setter Mike Lovato; cranker Jason Hylton; and copper, Ron Clark. Second Place went to Denver Water with a time of 1 minute 52.72 seconds. Denver Water was coached by Huey Wooten; setter Shane Fellman; cranker Jesus Saldivar; and copper, Saul Jimenez. Third Place was the Colorado Springs Utilities Honeybadgers with a time of 2 minutes and 27.40 seconds with team members coach Russ Mills; setter Christian Gilbert, cranker Donnie VanDruff, and copper Matt Smith. Congratulations to all! ♦

Hey Operators! Up for a little friendly competition? Want to demonstrate your skills? What do you say to increasing the number of teams for the 2013 RMSAWWA/RMWEA Joint Annual Conference to be held in Keystone? Put teams together now and practice, practice, practice!

Request for Application Grant Awardees

by Jacki Main, Safe Drinking Water Program

In September 2012 the capacity building unit of the safe drinking water program solicited applications to provide public water system training to small public water systems in rural areas of Colorado. Twenty applications were received from 10 organizations resulting in grant funding awards to the seven organizations listed below. The resulting projects are completely supported by set-aside funds from the Colorado drinking water state revolving fund (DWSRF) federal capitalization grant. These federal funds are used to support a variety of activities, such as providing technical training and assistance to small water systems, necessary to accomplish the requirements of the safe drinking water act. Watch your email box for notification of training locations and dates from the 2012 grant recipients. Also check the training opportunities webpage for up-to-the-minute training event information.♦

Grant Recipient	Training Topics
Colorado Rural Water Association	Applied operator mathematics, pump operation and maintaining water quality
Community Assistance Corporation (RCAC)	Drinking water board and council trainings
Indigo Water Group	Chlorine disinfection, sampling, chain-of-custody, record keeping and utility management fundamentals
JDS-Hydro Consultants, Inc	Small system documentations
Oxenford Consulting	Locating mains, addressing water loss and finding leaks
Rocky Mountain Environmental Finance Center	Small system sampling, monitoring and reporting training
Rocky Mountain Water Solutions, LLC	The why and how of public water supply disinfection

Simple Fixes: Chemical Feed Pumps

by Cameron Wilkins, Field Services Unit

There are a large number of potential significant deficiencies and major violations identified by the Colorado Department of Public Health and Environment (department) each year that can be attributed to low chlorine residuals. Some of these eventually result in a tier 1 public notice (boil water order) and a number can be linked back to chemical feed failure. Chemical feed failure can be avoided by routine maintenance and inspection practices. Routine maintenance practices and schedules are typically defined by the specific chemical feed pump manufacturer for the pump your system is using. The department advises you to consult with your pump manufacturer as to whether your maintenance schedules are in tune with what the manufacturer recommends. It should be noted that you should evaluate your specific conditions as they may require more stringent maintenance schedules.

Example of a chemical feed pump.

In addition to manufacturer maintenance recommendations, routine visual inspections should be included in any chemical feed system maintenance plan. Routine visual inspections help identify potential issues before they become a public health concern. Visual inspections could include checking the chemical feed tank and the chemical feed system tubing all the way to the injection pump. The inspection should evaluate the system for any type of leak, cracks, corrosion or residual build up. During visual inspections, the amount of chemicals in the chemical feed tank should be checked to ensure there is an adequate chemical supply in the tank to last until the next time an inspection could be performed.

In addition to routine maintenance, the system should have a contingency plan for the event that the chemical feed system does fail. A redundant pump or critical spare parts for the pump should be readily available. Contacts for neighboring water systems also may come in handy during a failure.

Please remember that performing routine maintenance on critical components of your water treatment process can help avoid future violations or disease outbreaks. ♦

Sanitary Survey 101Coaching for TUs

by Armand Herald, Capacity Building Unit

Every Colorado public water system is subject to a sanitary survey every three to five years depending on the population served and type of water source. Could you use a little extra help preparing for your next sanitary survey? If the answer is yes there is exciting news. This year the Water Quality Control Division's capacity building unit will be working to provide proactive sanitary survey training. This training will be offered through the capacity building unit's "Coaching for TU's Program". This program makes OCPO-approved training units available to small water system operators in a one-on-one, on-site setting.

Starting this year, your public water system will be contacted approximately three months before your sanitary survey is scheduled and proactively offered the *Sanitary Survey 101* coaching for TU's course. During this two-hour training course operators will review the elements of a sanitary survey and gain an understanding of the deficiencies that may be identified. Operators will have the opportunity to get feedback on the applicability of each sanitary survey element as it pertains to his or her water system. All participants will receive 0.25 training units upon completion. Please consider taking advantage of this great opportunity to be confident, prepared and to shine during your system's next sanitary survey. ♦

Coach's Corner

Drawn by Tiffany Jackson

Operations and Maintenance Tips

by Mike Bacon, Capacity Development Coach

Congratulations!! You made it through the summer!! Peak demand is over and maybe it's time to build your operations and maintenance manual (O & M) or review your existing manual for updates.

Did you know a capacity development coach will come to you, free of charge, help build your system's operations and maintenance manual and provide up to 0.4 training units? Yes! The capacity building unit has just rolled out *Hands-On Operations and Maintenance Manual* as the newest addition to the "Coaching for TU's" course offerings.

How does a system prepare to build an operations and maintenance manual? Well, prior to the scheduled visit from a coach, gather the following items:

- Treatment process diagrams
- Distribution system maps
- Equipment inventory or list of assets
- General monitoring plan
- Water quality monitoring schedule
- Water system contact list
- Knowledge or record of current operation and maintenance schedule
- Knowledge or record of operating procedures
- Operating budget
- Cross connection control records

During the four-hour visit, these items will be used to populate the operations and maintenance manual. You might even have an opportunity to showcase your system to the coach.

How do you request this one-on-one training? It's easy! Connect to the Colorado Department of Health and Environment, Water Quality Control Division website at www.colorado.gov/cdphe/wqcd. In the "Services" box located in the middle of the page, click on "Training Opportunities." Next look for "on-line coaching request". Click on the hyperlink, fill out the form and you are on your way. If you want assistance on any of these themes:

- disinfection
- monitoring requirements
- concentration over time (CT), or
- plant optimization

You can use that same coaching request form. Yes, with one form, a system can request multiple coaching for TUs courses along with general coaching visits. How much easier can it get?

While on the training opportunities web page, take a moment or two to review the information presented. Bookmark this page as it is sure to become one of your favorites for training opportunities. Here you will be able review descriptions of available coaching for TUs courses, including a four-hour presentation about building an operations manual. Take a look at training opportunities our contractors offer, one may be coming to a location near you. Check back frequently as new courses are added throughout the year.

Let us know if you would like to host a training event for your water system or invite other systems to any of these trainings, please call 303-692-3665.

Contact a coach today to get the operations and maintenance manual underway!!

Operators:

Have some time-saving helpful hints or tips to share with your fellow operators? Send those tips by mail: Aqua Talk, WQCD, 4300 Cherry Creek Drive South, Denver, CO 80246; or fax 303-782-0390 along with your name and the water system you represent. You might just get published!

What Do You See?

by Cameron Wilkins, Field Services

Improper sampling techniques can lead to false positive total coliform (TC) samples. In order to prevent false positive results, you may want to evaluate your TC sample procedure. In the picture, the sampler is using rubber gloves and a sterile sample bottle. On the other side of the coin, the sampler may have missed a couple of recommendations that could help in the future. Please remember the following tips in taking a TC Sample:

- All operators should be trained in the proper technique in collecting samples.
- Collect samples within the first part of the sampling schedule.
- All routine sample sites need to be *representative* of the *entire* system.
- Samples should not be taken from an outside spigot/ hydrant, a tap that has a gooseneck faucet or swivel faucet, as these faucets often generate a false positive. If the sample is taken from one of these points as no other place could be located, the operator should take additional steps to prevent false positive results by ensuring the faucet is thoroughly flushed and water being tested is representative of the water in the distribution system.
- Test the chlorine residual prior to taking the TC sample to assure that the sample is representative of the water the distribution system.
- Label the sample bottle and chain of custody prior to sampling.
- Sample in a manner that does not allow cross contamination from nearby surfaces and the water sample.
- Fill the bottle *slowly* just above the fill line or the 100 milliliter mark. (A little over is better than a little under the mark.)

If to in

- Get the sample to the lab as soon as possible. Keep it chilled and in a cooler when transporting the sample. Please note per Article 10 of the *Colorado Primary Drinking Water Regulations* a total coliform sample has 30 hours from time of sample collection to initiation of analysis and should be cooled to below 10 degrees Celsius during transit. Also, fecal coliform samples have eight hours from a time from sample collection to initiation of analysis and the samples must be held below 10 degrees Celsius during transit.

Hopefully by reviewing your sampling procedure and following some recommendations, you won't have a total coliform sample come back as a false positive.♦

Coming Down the Pipe…

Drinking Water Revolving Fund 2013

by Mike Beck, Grants and Loans Unit

The drinking water revolving fund (DWRF) program has implemented a “Notice of Intent” (NOI) to apply for funding to aid in identifying potential loan demand versus loan capacity. If you have not already submitted a NOI and plan to seek funding from the DWRF, please contact your respective project manager. There have been 28 entities that have completed the NOI, which totals more than $90 million. For 2013, there will be four application cycles: March 15, June 15, Sept.15 and Dec. 15. The most critical application deadline will be June 15 as this will be the only application date for inclusion into the project prioritization for any available additional subsidy. The DWRF has had the requirement to issue additional subsidy over the past three years. It is still uncertain if this will still be a requirement for the 2013 cycle. Applicants interested in the June 15 application date are encouraged to review the 2013 drinking water intended use plan, submit NOI’s as early as possible and contact their regional grants and loans project manager to determine the best application deadline for their project needs.

Another notable change for 2013 will be the eligibility and issuance of the $10,000 planning and design grants. Historically these grants were issued on a first come-first-serve basis. Due to the popularity and the demand for these grants, the program now will open a request for application (RFA) period starting the first part of January. The RFA is expected to remain open for 30 days, so it will be important to submit application for funding before the RFA period closes. The program will prioritize the planning and design grants per the process outlined in the annual intended use plans. Prioritization will only occur if there are more requests for funding than available funds. It is anticipated there will be a total of 25 drinking water grants in the amount of $10,000. If you are interested in learning more about these grants, please contact your regional grants and loans project manager. ♦

Facility Operator Certification News

by Jackie Whelan, Facility Operator Program

Check out our new web site! The Water Quality Control Division's new web address is www.colorado.gov/cdphe/wqcd. The site has a whole new look and feel. You'll find facility operator certification report forms, information, and links by clicking on "Facility Operator Certification" under the "Services" heading. Once you're on the facility operator certification (FOC) web page, click on the tabs in the center of the page. Each will open a dialog box with information about the Water and Wastewater Facility Operators Certification Board, operator certification, training units, operator in responsible charge (ORC), owners' responsibilities, complaints, enforcement actions and penalties, training opportunities, and other information and links. For example:

- Under the board's tab, links to the board's web page lead you to the board's meeting schedules, policies, statute, regulations, disciplinary actions and appeals process.
- The Operator Certification and Training Units tab includes a link to the Operator Certification Program Office (OCPO) web site for information about exam application forms, fees and deadlines; dates for exams; renewals, and a lot more.
- Regulation 100 requires the owner of a water or wastewater facility to notify the division within 30 days of a change in the ORC for their facilities. Under the ORC tab you'll find links to both the water and wastewater ORC update forms. For drinking water systems, use the *Public Water System Inventory Update Form*; the ORC information is the last section on the "Contact Information" sheet. Be sure the owner or their designee signs the top portion! You only need to complete the sections that have changed, not the entire portion of the monitoring plan.
- The ORC tab has a new feature! At the bottom of the dialog box you'll find lists of both water and wastewater facilities and the ORC of record for each facility. If you have any questions or concerns, please contact cdphe.facilityoperator@state.co.us.
- Recent presentations given by FOC staff are posted under the "Information and Links" tab.

Your suggestions always are welcome. If there's something you don't see, but would like to have available on-line, please send a note to cdphe.facilityoperator@state.co.us. ♦

Operator in Responsible Charge and Written Operating Plans

by Jackie Whelan, Facility Operator Program

Regulation 100, section 100.18.2 states, "all process control and/or facility integrity decisions with respect to water quality or quantity or wastewater effluent quality or quantity that may affect the public health or the environment are made by either an ORC or by another certified operator." Section 100.30 (owner responsibilities) clarifies the operator must be certified at a level equal to or higher than that of the facility. Many water systems, especially small systems, don't have an operator certified at or above the level of the facility on-site at all times to oversee routine tasks of plant management. Did you know compliance wuith this requirement can be reached with a written operating plan?

The ORC may need to delegate routine tasks to other personnel. Those personnel are either: 1) non-certified staff (perhaps a volunteer, such as an HOA member), 2) staff not certified at the level of the facility and 3) those who are certified at the level of the facility, but who are not the ORC.

The water and wastewater facility operators certification board policy "Delegation of Tasks to Uncertified Personnel" specifies that routine certified operator tasks may be delegated through a delineated written operating plan. The plan should clearly define limits of such tasks, especially when tasks are performed in the ORC's absence. It's the ORC's responsibility to define the scope of activities, what level of personnel can perform the tasks and what circumstances require the ORC's input before acting. The ORC retains supervisory responsibility and authority with respect to the operation of the facility and for the functions of other facility operators at all times.

A clear, written operating plan provides a roadmap ensuring everyone understands roles and responsibilities within the facility for the day-to-day operation and maintenance of the treatment plant and distribution system.

For more information about developing your operating plan visit www.colorado.gov/cs/Satellite/CDPHE-WQ/CBON/1251604424025. For assistance with developing an operations and maintenance manual contact the capacity building unit's drinking water coaches at 303-692-3665 or cdphewqdwtraining@state.co.us.♦

Ask Aqua Man

Dear Aqua Man,

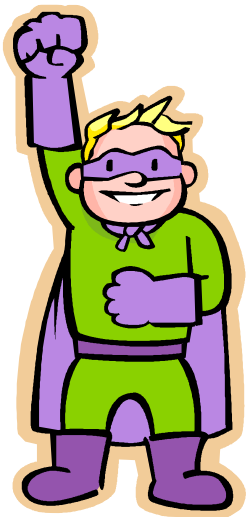
Help, I need training units! Where can I find information on available training and assistance for water treatment and distribution system operators?

Sincerely,

Treet Mywater

Dear Mr. Mywater,

Thanks for your question and commitment to providing safe drinking water! You've really hit the nail on the head, safe drinking water doesn't happen without well-trained certified operators and there are a lot of opportunities out there to get this critical training. A great resource to identify upcoming training opportunities is the Colorado Department of Public Health and Environment website. Click on "Division/Program", then scroll down to "Water Quality Control Division", look under "Services", and click on "Training Opportunities". The first thing you will see is information regarding the coaching for TU's program. Please consider contacting a capacity coach to schedule a visit to receive free one-on-one, onsite training. I encourage you to also review the training opportunities listed next, there are quite a few to choose from. Finally, please review the "Other Resources" section for additional opportunities for training. Clicking on the "Operator Training Opportunities" link will take you to a digest of other training partners and opportunities.



Conscientious operators like yourself help ensure always safe drinking water in Colorado. Thanks again for your question.♦

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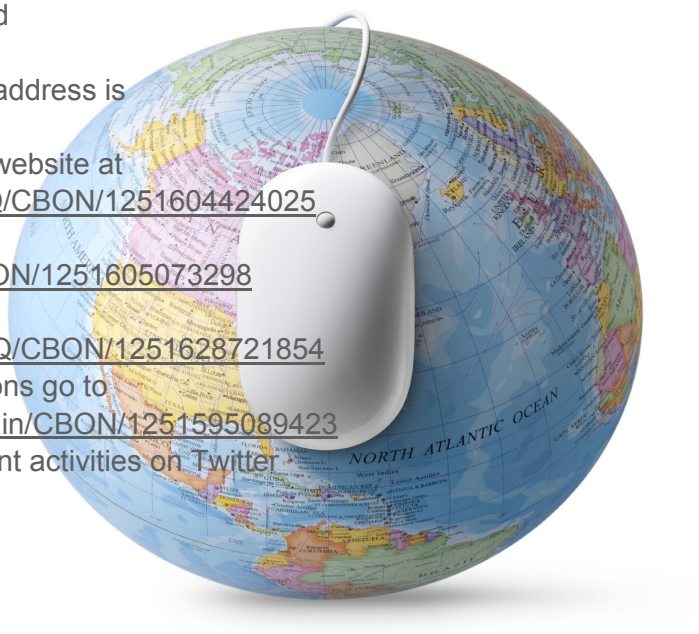
Follow safe drinking water program on Twitter!
twitter.com/CO_SafeWater
Subscribe to safe drinking water program's RSS feed
twitter.com/statuses/user_timeline/35859511.rss
The water quality control division's home page web address is
www.colorado.gov/cdphe/wqcd
For training opportunities, please visit the division's website at
http://www.colorado.gov/cs/Satellite/CDPHE-WQ/CBON/1251604424025
To access Aqua Talk online, go to
www.colorado.gov/cs/Satellite/CDPHE-WQ/CBON/1251605073298
To access inspection services go to:
http://www.colorado.gov/cs/Satellite/CDPHE-WQ/CBON/1251628721854
To access the contact list for drinking water regulations go to
http://www.colorado.gov/cs/Satellite/CDPHE-Main/CBON/1251595089423
Follow the water quality control division's enforcement activities on Twitter
twitter.com/WQCD_Enforce



Colorado
Safe Drinking
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Aqua Talk

Aqua Talk Newsletter

The following people contributed to the production of this issue of Aqua Talk: Ron Falco, Jacki Main, Tyson Ingels, Serenity Valdez, Paul Kim, Mike Beck, Jackie Whelan, Dan Simpson, Melissa (McClain) Swerdlow, Cameron Wilkins, Armando Herald and Mike Bacon.

We welcome comments, questions, story ideas, articles and photographs submitted for publication. Please address correspondence to Jacki Main, Aqua Talk Newsletter, Water Quality Control Division, 4300 Cherry Creek Dr. S., B2, Denver, CO 80246,1530 or email comments.wqcd@state.co.us. Enter "Safe Drinking Water Newsletter" as the subject. Past issues are available by contacting the editor or visiting the website at: www.colorado.gov/cs/Satellite/CDPHE-WQ/CBON/1251605073298

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of Public Health
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