State Water Resources Control Board

Updated April 2, 2020

TO: All Public Water Systems

RE: Public Water System COVID-19 Considerations

The provision of potable water to your customers is an essential function. This guidance offers suggestions on ways to reduce the impact of COVID-19 on the operation of PWSs and to support the continued delivery of potable water during this pandemic. It is necessary that public water systems (PWSs) provide ongoing water quality monitoring and reporting in accordance with laws, regulations and permit requirements. All recommendations are based on information available and may be amended or added to as information develops.

Additional information supporting the federal designation that drinking water is an essential function is provided at the following links. Please refer to these if there are any questions from either your staff or others questioning ongoing operations with appropriate staffing.


1. Continued Communications

Communication both within your organization and with customers and public health officials is critical to ensure clear understanding that the water provided is suitable for drinking, cooking, bathing and all other potable uses. The status of the water system operations, including any issues where assistance may be needed, should be communicated to local Emergency Operations Centers and the DDW District Engineer.

The Center for Disease Control and the California Department of Public Health are the primary source for public health information. The Water Research Foundation reports that drinking water is not a vector for COVID-19 and your staff and the public can be assured that their water does not transmit the virus.

Considerations:
a) Keep staff informed on the status of COVID-19 in your community. Make Personal Protective Equipment (PPE) available as needed.

b) Provide guidance to staff reminding them of the importance of community social distancing measures including discouraging staff from gathering elsewhere.

c) Develop and implement a plan to communicate with the water system customers as necessary.

d) Contact and coordinate with the County Emergency Operations Center (if it has been activated) or Local Public Health Department as needed concerning clusters of respiratory disease or spikes in absenteeism.

e) Keep the drinking water regulatory agency (Division of Drinking Water (DDW) local District Office or Local Primacy Agency (LPA) representative) informed of issues related to maintaining essential functions and ongoing permit.

Information currently available about the novel coronavirus or COVID-19 and drinking water impacts:

- Currently, there is no evidence that the COVID-19 virus survives the disinfection process for drinking water and wastewater. The public can continue to use and drink water from their tap as usual. Visit the U.S. EPA's webpage on the Coronavirus and Drinking Water and Wastewater for up to date information.

- According to the World Health Organization, the “presence of the COVID-19 virus has not been detected in drinking water supplies and based on current evidence the risk to water supplies is low.”

2. Maintaining Staffing Capabilities

Water systems need to evaluate how to operate and maintain water with staffing shortages. Several factors can influence this shortage, including staff being sick, caring for sick family members, caring for children who are home, self-quarantine due to known exposure or local government mandates, or staff who fall in the at-risk category (over 65 years of age, underlying health conditions). It is important to remember that water delivery is an essential function within the mandates established by state and local government, and the PWS should be prepared to identify means to ensure ongoing operations.

Considerations for staffing:

a) Prioritize tasks to ensure essential functions are addressed. Identify necessary staffing, including backup staff to maintain these essential functions. Ensure consideration of facility operational requirements as well as regulatory and permit requirements. Low priority tasks may need to be postponed until time and resources are available. Your prioritization should be shared with your regulator (DDW District Engineer or LPA representative).
b) Sign up with a mutual aid organization such as the California Water Agency Response Network (CalWARN). You can then identify other nearby water utilities that are mutual aid partners and plan for staffing assistance if/when necessary.

c) Review and update emergency response plans, including continuity plans for PWS essential functions.

d) Develop standard operating procedures for critical processes, such as adjusting chlorination or other chemical feed equipment.

e) Cross train staff NOW to prepare workers for nonstandard work duties.

f) Consider implementing staggered work regimen while still maintaining essential functions to maintain social distancing and limit the number of staff who are together.

g) Encourage the mentoring or “phone supervision” of apprentice staff. Consider collaborating with a neighboring or larger water utility who may have more senior staff available by phone. Your regulator or the CalWARN network are resources to assist. This could apply to situations where a second senior person would normally be on site, and now is “present” via phone. Another example would be changing a chemical dose pump setting where the novice operator needs a peer review. All activities should emphasize operatory safety.

h) Consider remote participation capabilities such as video or telephone conferencing, live streaming meetings, or other options that permit staff the flexibility to stay home when sick, need to care for sick household members, or are at high risk for complications from COVID-19.

i) Use cameras, video feed or facetime to monitor multiple sites with fewer staff.

j) Review how your staff might plan for issues at home. If your staff have problems at home, they will not come to work. If your staff don’t come to work, you don’t have an operational water system. While this is a known emergency issue, it takes an elevated role in this pandemic. Home issues are likely to include:

   a. Staff or family are sick (ensure sick-leave policies allow staff to stay home if they have any symptoms)
   b. Family loss of income
   c. Elder care
   d. Childcare
   e. Shortages of supplies

k) Make sure your policies are flexible (e.g. can staff take a utility vehicle home if needed?).

3. Laboratory Services

Many water systems depend on commercial laboratories, sampling services and courier services to manage water quality sample collection and analyses. Many of these labs are small operations and could easily experience backlogs or delays due to staffing shortages of their own. All water quality monitoring is essential to ensure the water remains safe and should continue based on the schedule in place for your
water system. If there are challenges in conducting any required monitoring, you should be reaching out to the DDW District Office or LPA to discuss options.

**Several actions are recommended:**

a) Talk to your lab and develop a plan for water sample collection and delivery when the normal processes cannot be implemented.

b) Identify whether your lab is maintaining adequate staffing to meet your monitoring needs. If it cannot, identify a secondary laboratory that can fill the gap.

c) Through the CalWARN network, identify other nearby members that may have in-house laboratory facilities. Work with them to see if they can be part of your emergency plan.

d) Obtain additional sample kits (cooler, sample bottles, sample location maps, ice packs and chain of custody forms). Make sure everything is clearly labeled on the assumption that you may need backup/alternate staff to perform these duties. Include a map of your sample locations (photos of the actual sample station help to ensure sampling at the correct locations).

e) Ensure backup samplers are trained in sample collection procedures.

f) Coordinate all sample collection and delivery with your laboratory to ensure the ability to analyze the samples within the specified holding times.

4. **Maintain Enough Consumables (Chemicals and Materials)**

Evaluate what supplies are critical to your operation. In many cases it will be chlorine and or treatment chemicals. The government messaging calling for self-isolation may result in reduction in delivery drivers. If this affects your chemical supplier, and deliveries are delayed or cancelled, how will you operate?

**Several steps to consider:**

a) Increase your on-hand inventory of supplies. You may need to double your chlorine, salt, or alum stock, for example.

b) Additional temporary chemical storage facilities may be required. This can take the form of plastic storage totes, tanks or tractor trailer truck tankers or railcars.

c) Make sure you date your inventory and practice safe storage and handling. If you use temporary storage be sure to clearly label and have the Material Safety Data Sheet on the container.

d) Purchase spare parts now for all critical equipment. Maintain an inventory of parts available.

e) Coordinate with your materials supplier and transporter. Encourage them to take similar staff protective measures to assure their functionality and service.
Consider multiple alternate sources of materials supply and establish contact
with them now.

f) Through the CalWARN network, identify resources (including human resources)
that other nearby members may have on hand.

5. Financial Considerations

It is likely that the economy will be challenged during this pandemic impacting both
staff and customers. Customers may not be able to pay their bills and it is essential
for water utilities to plan for how to handle these situations. Utility staff may also be
experiencing financial difficulties due to loss of jobs within their family. Staff with
health impacts who are unable to work may run out of sick leave. In an extended
scenario, water utilities may have cash flow issues. Some of these problems may be
addressed at a federal level, some at a state or regional level and some by the water
district. You are encouraged to start the discussions and planning now.

6. Prepare for Response

Review, update, and prepare the implementation of the emergency response plan
and/or your Emergency Notification Plan procedures if needed. Be prepared to
implement the necessary protective measures: public notifications – unsafe water
alerts, BWN, DND, etc. Have the emergency generators tuned and ready? Know
where the valves are and how to operate them to direct the flow of water where
needed. Understand that critical infrastructures such as water, electricity, fuel, gas
all require people who are also susceptible to the ongoing COVID-19 threat.

7. Maintaining the Cross-Connection Control Program (New 4/2/20)

Maintaining a cross connection control program is considered an essential function
for the protection of the distribution system from contamination. The following
activities should be maintained during the COVID-19 crisis:

- Any newly discovered cross connections must be corrected immediately to
  protect public health: locking out water meters while corrective actions are
  being taken would be appropriate if it is needed to prevent distribution system
  contamination.
- Backflow prevention device testing should continue as scheduled when
  possible. However, since testing is an annual requirement, PWS’s should
  consider providing flexibility to customers on device testing due dates,
  provided testing can be completed within the calendar year.
- Failed devices should be repaired or replaced immediately. PWS’s should
  consider providing assistance to customers to ensure testing and corrective
  actions can be completed in a timely manner, for example, device repair and
  replacement services when testers or contractors are not available, or
  customers are unable to coordinate.
• Recycled water use site cross connection tests should continue as scheduled when possible, but flexibility should be considered, provided they are completed within the calendar year.
• Backflow testers are essential workers, whether they are PWS employees, are contracted by the PWS, or are hired directly by customers.
• Most backflow devices should be in areas where maintaining safe social distance would not be a concern. For devices where a safe distance cannot be maintained (for example, interior devices) consider deferring those tests until later in the year and moving up other, safer test locations.
• If the PWS has customers that directly hire a backflow tester, typically from a provided list, and they cannot afford to pay for testing due to economic hardship, investigate having the PWS directly contract for the testing of those devices and recover payment through regular billing. The PWS should exhaust every avenue before shutting-off someone’s water during this emergency.


With the concerns over the COVID-19 and the associated precautions to be observed, inquiries have been posed about the ability of the chief operator to provide remote supervision to onsite shift operators. The question is whether this adequately satisfies regulatory requirements for lead and shift operators. Any proposals or needs for such arrangements may be considered only on a case by case basis upon consultation, coordination, and approval by your District Engineer/Local Primacy Agency.

Links to information:

Center for Disease Control  https://www.cdc.gov/
California Department of Public Health  https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Guidance.aspx
Local Primacy Agency Contact Information  https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/rtcr/lpa_contact_info.pdf
Local Public Health Contact Information  https://www.cdph.ca.gov/Pages/LocalHealthServicesAndOffices.aspx#
U.S. EPA  https://www.epa.gov/coronavirus
Water Research Foundation  https://www.waterrf.org/event/coronavirus-research-update (you must enter your email address (register) to view this webcast).
California Water Agency Response Network (CalWARN) http://www.calwarn.org/