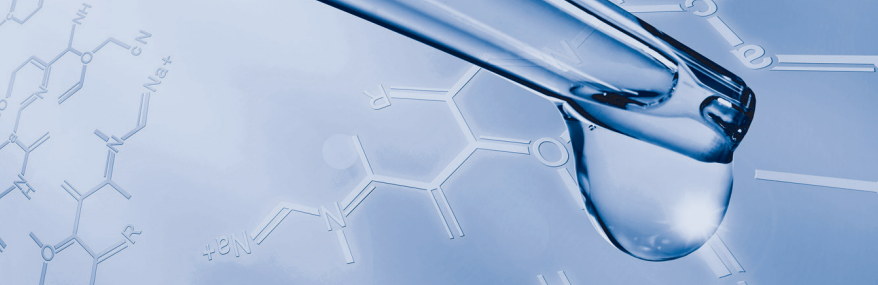


SAFE DRINKING WATER ACT (SDWA)

COMPLIANCE SUPPORT AND TESTING SERVICES

To ensure the safety of building water systems, Water Management Teams often choose to apply supplemental disinfectants, such as the EPA- approved options of chlorine, chloramine or chlorine dioxide. While this practice is chosen to ensure necessary controls are in place to prevent harm from waterborne pathogens, it is also necessary to ensure the operators of these systems are compliant with the federal Safe Drinking Water Act (SDWA)¹.



Safe Drinking Water Act Overview

The oversight of water systems is typically handled by each state's drinking water program. Each state is granted this authority, called primacy, if they have shown that they can adopt standards at least as stringent as the US EPA's standards. States ensure water systems are tested for contaminants, among other duties. As a result, each state may have differing requirements for compliance testing and water quality.

Typically, SDWA compliance testing includes monitoring for coliforms, nitrates, nitrites, disinfectant concentration, and disinfectant by-products (DBP). DBPs include total trihalomethanes and various haloacetic acids for chlorinated systems or chlorite for systems utilizing chlorine dioxide. The chart below outlines the federal minimum compliance testing requirements.

Safe Drinking Water Act (SDWA) Compliance (40 CFR 141-143): *Compliance Testing Requirements*

Contaminant	Initial Frequency	Reduced Frequency	Routine Frequency
Coliform Bacteria	Monthly	Quarterly	Annually
Lead and Copper	Semi-Annual	Annually	Every 3 years
Nitrate/Nitrite	Annually	Annually	Annually
Chlorine/Chloramine	Daily* and Monthly	Quarterly	Annually
Chlorine Disinfection By-products (DBPs)	Quarterly in month of warmest water temp	Annually in month of warmest water temp	Every 3 years in month of warmest water temp
Chlorine Dioxide	Daily	Daily	Daily
Chlorite ² , on site	Daily	Daily	Daily
Chlorite ²	Monthly	Monthly	Monthly

*or verification if using accepted automated method



Phigenics does not sell water treatment chemicals and is not biased toward any particular water treatment technology or supplier.



What Constitutes a Public Drinking Water System (PWS)?

The National Primary Drinking Water Regulations define a Public Drink Water System (PWS) as a system which provides piped water for human consumption and has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

The system includes any collection, treatment, storage, and distribution facilities.

Are There Exemptions?

There are specific exemptions stated in the code, but if a building water system has supplemental disinfection treatment then it must comply with the SDWA testing requirements.

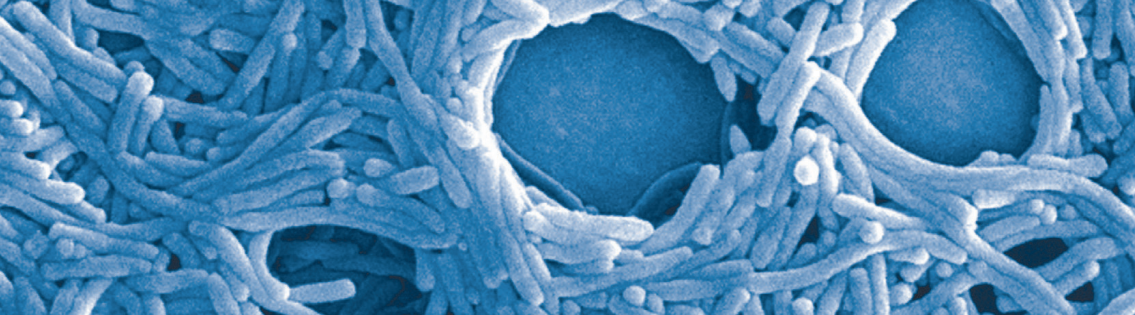
Phigenics' SDWA Leadership

Phigenics' independent, expert representatives and on-staff PWS operators have the knowledge that can guide you through the SDWA compliance process, saving you time & valuable resources and providing peace of mind that your potable water systems are being safely effectively operated. Your representative can help you:

- ✓ Identify state-specific compliance testing needs for you facility
- ✓ Develop an SDWA sampling plan
- ✓ Manage required sampling, testing, and reporting
- ✓ Evaluate test results via cloud-based data management
- ✓ Consult on adjustments needed to ensure the federal and state requirements are being met

Empowered by
 **phiAnalytics™**

- ✓ Gain instant access to all SDWA compliance testing data securely with an internet-connected device.
- ✓ Access all compliance testing data from the same water management portal used for all other water management needs at our facility.
- ✓ Collaborate and review with colleagues simply and easily.
- ✓ Receive immediate notification for any out of compliance test result.
- ✓ Utilize graphs and charts to see compliance testing trends over time.



Useful Resources

- ¹Drinking water standards apply to water systems differently based on their type and size. See “Understanding the Safe Drinking Water Act” on the following website for definitions and requirements:
<https://www.epa.gov/dwstandardsregulations>
- Total Coliform Rule: A Quick Reference Guide
<https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=3000663W.txt>
- Lead and Copper Rule: A Quick Reference Guide
<https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P10058C5.txt>
- Stage 1 Disinfectants and Disinfection Byproducts Rule: A Quick Reference Guide
<https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100C8XW.txt>
- Stage 2 Disinfectants and Disinfection By-products Rule: A Quick Reference Guide for Schedule 4 Systems (NTNCPWS serving less than 10,000 users)
<https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100C8XW.txt>
- National Primary Drinking Water Regulations alphabetical list of contaminants:
https://www.epa.gov/sites/production/files/2016-06/documents/npwdr_complete_table.pdf
- ²EPA-approved chlorite test methods:
<https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P100WD1L.txt>

Legionella pneumophila photo credit: Janice Hanety Carr; Provided by CDC/ Margaret Williams, PhD; Claressa Lucas, PhD; Tatiana Travis, BS