

Annual Drinking Water Quality Report

CONTACT INFORMATION

Public Information:

Jaimye Bartak or Katie Shea (413) 452–1300

Water Quality Concerns & Water/Sewer Emergencies (24/7): (413) 310–3501

Billing/Account Questions:

(413) 452-1393

Water/Sewer Service, Repairs (24/7): (413) 310–3501

SPRINGFIELD WATER AND SEWER COMMISSION

2023 BOARD OF COMMISSIONERS

Daniel Rodriguez, Chairman Vanessa Otero, Commissioner Matthew Donnellan, Commissioner

Joshua D. Schimmel

Executive Director

(413) 452-1300 info@waterandsewer.org waterandsewer.org PWS# 1281000



The Board of Commissioners meets monthly. Please call 413-452-1300 or visit waterandsewer.org/updates/public-notices/ for meeting dates and times or to obtain extra copies of this report.

The Springfield Water and Sewer Commission provides this report to meet federal and state Safe Drinking Water Act requirements.

Message from the Executive Director

Dear Customer.

As stewards of our region's drinking water, the Springfield Water and Sewer Commission takes great pride in delivering on our mission to provide essential services to our 250,000 customers in the Lower Pioneer Valley every day.

To ensure we continue to deliver on our mission the Commission has initiated a major capital improvement program, including construction of the new West Parish Water Treatment Plant, which will replace end-of-life infrastructure and address regulatory compliance issues (page 6). In 2023 the Commission reached the 90% design milestone of the new facility. Design is now complete. Construction is scheduled to begin later in 2024 and be complete in 2028.

An update on construction progress and design renderings is included in this report. This report also summarizes the more than 52,000 water quality tests from the past year and provides information about the source of your drinking water, the filtration and treatment process, and other useful information.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail. This report is available online at www.waterandsewer.org/waterqualityreport.

Joshua D. Schimmel
Executive Director



Who We Are and What We Do

Check out this brief video to learn more about the Commission and the work we do to provide essential water and wastewater services. Visit:

https://bit.ly/4d0szXI or scan the QR code

Protecting Your Water Source

Cobble Mountain Reservoir (Source ID 1281000-02S) and Borden Brook Reservoir (Source ID 1281000-04S) are the Commission's primary water supplies. The reservoirs are located in Blandford and Granville, Massachusetts and surrounded by 14,000 acres of protected forestland within the Little River Watershed. A well protected water supply is an important first step in the water treatment process and ensures a high-quality supply, from source to tap.

To protect your drinking water supply source the Commission maintains an active Watershed Management Program. As part of the program the Commission monitors for encroachment and potential sources of contamination, conducts maintenance of watershed infrastructure, including roads and culverts, and oversees other forest management activities to promote a healthy and resilient forest.

The Massachusetts Department of Environmental Protection (MassDEP) completed a Source Water Assessment that evaluates the susceptibility of public water supplies to contamination from surrounding land uses. A susceptibility ranking of **moderate** was assigned to the Commission's system using the information collected. Risks identified include residential land use, transportation rights of way, and agriculture. The complete Source Water Assessment Program report is available by contacting the Commission at 413-452-1300 or at www.mass.gov/doc/western-region-source-water-assessment-protection-swap-program-reports.

How We Treat Your Water

Water exiting the coagulation and flocculation

Water from Cobble Mountain Reservoir and Borden Brook Reservoir is filtered and treated at the West Parish Filters Water Treatment Plant in Westfield. After treatment, clean drinking water is delivered to retail customers in Springfield and Ludlow and regional water treatment customers in Agawam, East Longmeadow, and Longmeadow, at an annual average of 30 million gallons per day.

The New West Parish Water Treatment Plant



Rendering of the new West Parish Water Treatment Plant (Hazen and Sawyer).

New West Parish Filters Drinking Water Treatment Plant: Phase 1 Construction The West Parish Filters Facility Improvements Plan began in 2015 and identified a

Plan began in 2015 and identified a multi-phase approach to replace aging infrastructure and meet current and future regulations.

Phase 1 of the upgrades at West Parish Filters was completed in 2023 and included a new Backwash Facility. The new Backwash Facility will allow the 1970's era filters to continue to operate reliably while the new plant is under construction.

Modernizing Our Drinking Water System

To replace end of life infrastructure, improve resiliency, and address regulatory compliance for disinfection byproducts (see page 6), the Commission is building the new West Parish Water Treatment Plant. In 2023, significant progress was made towards construction of the new plant including completion of the 90% design of the facility and initation of the procurement process. Design is now complete and construction is scheduled to begin later in 2024.

The new plant will modernize the drinking water system for the 21st century and will include a new treatment process, Dissolved Air Flotation (DAF), new filters, elimination of original slow sand filters, and new chemical feed systems.

Construction of the new plant, which is carefully designed to treat the water from the Commission's water source (Cobble Mountain Reservoir) is scheduled to begin in 2024 and be complete in 2028.

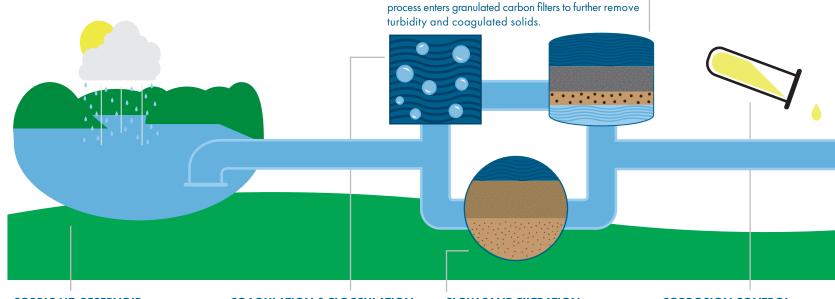
Learn More

More information on the new water treatment plant as well as project updates:

waterandsewer.org/new-water-plant or scan the QR code



How Your Water is Treated



RAPID SAND FILTRATION

COBBLE MT. RESERVOIR

Raw water is drawn from the reservoir in Blandford/Granville and flows to the West Parish Filters Water Treatment Plant.

COAGULATION & FLOCCULATION

Most of the raw water is mixed with coagulants in large tanks to cause solids and dissolved natural organic matter to bind together for removal.

SLOW SAND FILTRATION

A small amount of raw water moves directly to filtration in the slow sand filters to remove dissolved natural organic matter, turbidity and bacteria.

CORROSION CONTROL

Phosphate is added to the water to protect pipes from leaching lead or copper. Sodium hydroxide is added to adjust pH.

CHLORINATION

The new Backwash Facility at West Parish

Filters was completed in fall 2023.

Chlorine is added to kill any disease-causing microorganisms.

PROVIN MOUNTAIN STORAGE

The treated, chlorinated water is gravity-fed from the West Parish Filters Water Treatment Plant to storage tanks at the top of Provin Mountain in Feeding Hills.

PROVIN MOUNTAIN STORAGE TANKS

DIRECT TO YOUR HOME

Water continues to flow by gravity from Provin Mountain through transmission mains to the distribution system for use by more than 250,000 customers in the lower Pioneer Valley.

2023 SWSC WATER QUALITY INFORMATION TABLE

The table below shows detections of regulated contaminants through water quality testing in 2023 (unless otherwise specified), and how they compare to state and federal standards. Approximately 52,000 water quality tests were analyzed using the Commission's own statecertified laboratory and private laboratories in 2023.

The testing results are from finished water in the distribution system. In 2023, sample results for one regulated contaminant exceeded regulatory limits. Information about this exceedance is also contained in this report.

| PUBLIC WATER SUPPLY IDENTIFICATION #1281000 | | | | | | | | |
|--|---------------------|-------|---|--|---|-----------|--|--|
| DISINFECTANTS | DATE | MRDLG | MRDL | HIGHEST QUARTERLY ANNUAL AVERAGE | RANGE DETECTED AT INDIVIDUAL SAMPLING SITES | VIOLATION | MAJOR SOURCES IN DRINKING WATER | |
| Residual Free Chlorine (ppm) | Daily | 4.0 | 4.0 | 0.68 | ND - 2.68 | No | Water additive used to control microbes | |
| BACTERIA | DATE | MCLG | MCL | HIGHEST DETECTED LEVEL | RANGE DETECTED AT INDIVIDUAL SAMPLING SITES | VIOLATION | MAJOR SOURCES IN DRINKING WATER | |
| Heterotrophic Plate Counts (HPC) [‡] | Daily | N/A | ТТ | 167 | ND - 167 CFU/ml | No | HPC is an indicator method that measures a range of naturally occurring bacteria in the environment. | |
| INORGANICS | DATE | MCLG | MCL | HIGHEST DETECTED LEVEL | RANGE DETECTED AT INDIVIDUAL SAMPLING SITES | VIOLATION | MAJOR SOURCES IN DRINKING WATER | |
| Nitrate (ppm) | Yearly 11/9/2022 | 10 | 10 | 0.0738 | N/A | No | Erosion of natural deposits, runoff from fertilizer use | |
| Barium (ppm) | Yearly | 2 | 2 | 0.0078 | N/A | No | Erosion of natural deposits | |
| TURBIDITY * | DATE | MCLG | тт | HIGHEST SINGLE MEASURMENT | LOWEST MONTHLY PERCENTAGE | VIOLATION | MAJOR SOURCES IN DRINKING WATER | |
| Rapid Sand Filtration ** (NTU) | Daily Compliance | N/A | 1 | 0.081 | N/A | No | | |
| Rapid Sand Filtration ** (NTU) | Monthly | N/A | TT: at least 95% of samples per month below 0.3 | N/A | 100% | No | Soil Runoff | |
| Slow Sand Filtration *** (NTU) | Daily Compliance | N/A | 5 | 0.72 | NA | No | | |
| Slow Sand Filtration *** (NTU) | Monthly | N/A | TT: at least 95% of samples per month below 0.3 | NA | 100% | No | | |

[‡] Heterotrophic Plate Count is not associated with health effects but is a method that measures the bacterial quality of water as an indicator of the adequacy of disinfection.

| UNREGULATED**** 2023 Detections | DATE | ORSG/SMCL | MCL | HIGHEST SINGLE MEASUREMENT | RANGE DETECTED | VIOLATION | MAJOR SOURCES IN DRINKING WATER |
|---------------------------------|--------|-------------------------|------|-------------------------------|-------------------|-----------|---|
| Sodium (ppm) | Yearly | ORSG = 20 | None | 15.0 | N/A | No | Natural sources; runoff from use of de-icing compounds on roadways |
| Manganese (ppb) | Yearly | SMCL = 50 ORSG = 300 | None | 17 | N/A | No | Erosion of natural deposits |
| Chloroform (ppb) | Yearly | ORSG = 70 | None | 5.60 | N/A | No | By-product of |
| Bromodichloromethane (ppb) | Yearly | None Established | None | 0.69 | N/A | No | drinking water chlorination |

Special Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the **Safe Drinking Water Hotline (1-800-426-4791).**

2023 SWSC WATER QUALITY INFORMATION TABLE (CONTINUED)

| PUBLIC WATER SUPPLY IDENTIFICATION #1281000 | | | | | | | | |
|---|---------------|------|-----|-----------------|--|-----------|---|--|
| DISINFECTION BYPRODUCTS | DATE | MCLG | MCL | HIGHEST LRAA | RANGE DETECTED AT INDIVIDUAL SAMPLING SITES | VIOLATION | MAJOR SOURCES IN DRINKING WATER | |
| TTHMs (ppb) (Total Trihalomethanes) | Quarterly | N/A | 80 | 78 | 35-74 | No | By-product of drinking water chlorination | |
| HAA5 (ppb) (Total Haloacetic Acids) | Quarterly | N/A | 60 | 74 | 39-87 | Yes | By-product of drinking water chlorination | |
| HAA5 (ppb) by site | | | | | | | | |
| 833 Page Blvd. | Qtr. 1 | N/A | 60 | 61 | 45- <i>7</i> 1 | Yes | | |
| Catalina Pump Station | Quarterly | N/A | 60 | 70 | <i>5</i> 1 <i>-7</i> 8 | Yes | By-product of drinking water chlorination | |
| 1400 State St. | Qtr. 1 & 2 | N/A | 60 | 67 | 45-74 | Yes | | |
| Center St., Ludlow | Qtr. 1 | N/A | 60 | 64 | 51-62 | Yes | | |
| 1043 Sumner Ave. | Quarterly | N/A | 60 | 74 | 54-80 | Yes | | |
| 292 Main St. | Qtr. 1 & 2 | N/A | 60 | <i>7</i> 1 | 46-71 | Yes | | |
| N. Main St. Fire Station | Qtr. 1, 2 & 4 | N/A | 60 | 69 | 45-87 | Yes | | |

Qtr. - quater

Fifth Unregulated Contaminant Monitoring Rule (UCMR5)

As required by US Environmental Protection Agency (EPA), our water system has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a public health protection standard. The fifth Unregulated Contaminant Monitoring Rule (UCMR 5) was published on December 27, 2021, and requires sample collection for 30 chemical contaminants between 2023 and 2025.

The Commission completed annual sampling for UCMR5 in 2023 and is pleased to report that there were no detections for any of the 30 contaminants tested, which included 29 Per- and polyfluoroalkyl (PFAS) substances.

You do not have to do anything but as our customers you have a right to know that these data are available. For information on the Unregulated Contaminant Monitoring Program, visit the MassDEP website (http://www.mass.gov/eea/agencies/massdep/water/drinking/water-systems-ops.html) and navigate to Unregulated Contaminant Monitoring Program.

Important Information from U.S. EPA and MassDEP

What could be in the water before it is treated?

Sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, humans, and wildlife.

Inorganic contaminants, such as salts and metals, can be naturally occurring or result from urban storm water runoff, industrial, or domestic wastewater discharges, oil and gas production, mining, and farming.

Pesticides and herbicides may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

Organic chemical contaminants include synthetic and volatile organic chemicals that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.

Radioactive contaminants can be naturally occurring or be the result of oil and gas production, and mining activities.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contamination. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the **EPA's Safe Drinking Water Hotline (1-800-426-4791).**

In order to ensure that tap water is safe to drink, the Department of Environmental Protection (MassDEP) and U.S. Environmental Protection Agency (EPA) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and Massachusetts Department of Public Health (DPH) regulations establish limits for contaminants in bottled water that must provide the same protection for public health.

Glossary of Terms

CFU (Colony Forming Unit)

RAA (Highest Running Annual Average) - highest running annual average of four consecutive quarters.

LRAA (Locational Running Annual Average) - The average of four consecutive quarters of data taken at one location.

MCL (Maximum Contaminant Level) - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal) - The level of a contaminant in drinking water below which there is no known or expected risk to health. MC-LGs allow for a margin of safety.

MRDL (Maximum Residual Disinfectant Level) - The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MRDLG (Maximum Residual Disinfectant Level Goal) - The level of a drinking water disinfectant below which there is no known expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

N/A - Not Applicable

NTU (Nephelometric Turbidity Units) - A numeric value indicating the claudiness of water

ORSG (Massachusetts Office of Research and Standards Guideline) - The concentration of a chemical in drinking water, at or below which adverse health effects are unlikely to occur after chronic (lifetime) exposure. If exceeded, it serves as an indicator of the potential need for further action.

ppb (parts per billion) ppm (parts per million)

SMCL (Secondary Maximum Contaminant Level) - The highest level of a contaminant that is allowed in drinking water for the secondary contaminants. These standards are developed to protect the aesthetic qualities of drinking water and are not health-based.

TT (Treatment Technique) - A required process intended to reduce the level of a contaminant in drinking water.

- * **Turbidity** A measure of the cloudiness of water. We monitor turbidity because it is a good indicator of the effectiveness of our filtration system.
- ** Rapid Sand Filtration The turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed a maximum of 1.0 NTU in any single measurement.
- *** Slow Sand Filtration The turbidity level of the filtered water shall be less than or equal to 1.0 NTU in 95% of the measurements taken each month and shall not exceed a maximum of 5.0 NTU in any single measurement.
- **** Unregulated Contaminants Substances for which EPA has set guidelines but not established drinking water standards.

Building the Water Workforce of the Future

The Commission has not only initiated a generational reinvestment in the water system through projects like the new West Parish Water Treatment Plant, but it is also building the water workforce of the future. The Pipeline Program was launched in 2023 to provide Springfield high school students exposure to the many rewarding career pathways in the water sector. The program is one of several workforce initiatives the Commission has implemented to cultivate the next generation of water system stewards.

Learn more about the Pipeline Program: waterandsewer.org/pipeline-program





Pipeline Interns learn treatment plant operations at West Parish Filters from a member of the Commission's Water Operations team.



Staff from the Commission's Information Technology (IT) Department help Pipeline Program interns build cables and explain the many functions of IT at a regional water utility.

The Commission in the Community

In 2023 the Commission was pleased to participate in dozens of community events with its mobile water station.

Commission staff also enjoyed getting to know customers at neighborhood meetings and presentations, community expos, and other outreach events. The public even had the opportunity to visit us in 2023 with several Commission open houses and facility tours. Stay tuned for more opportunities to connect in 2024! Visit www.waterandsewer.org.





(Left) Members of the public tour the new Backwash Facility at the West Parish Filters Open House in October 2023. (Right) Commission staff greet the public and provide fresh tap water to attendees of the World's Largest Pancake Breakfast in Downtown Springfield in May 2023.

Public Notification - Disinfection Byproducts (DBPs)

Maximum Contaminant Level (MCL) Exceedance

In 2023, the Commission issued four quarterly Public Notices regarding exceedances of the MCL for the disinfection byproduct (DBP) haloacetic acids (HAA5). The MCL for HAA5 is 60 parts per billion (ppb) and is calculated as a 12-month locational running annual average (LRAA) of quarterly samples. The Commission first experienced a violation of the HAA5 drinking water standard in Fall 2018.

In accordance with regulations, the Commission issued a Public Notification by direct mail in paper billing statements, emails to electronic billing customers, the news media, and the internet for each exceedance.

This was not an emergency, and there was no immediate health risk. Customers were and are still advised that they can drink and use their water as usual. DBPs are regulated due the potential health risks if consumed at elevated levels over decades or a lifetime. Some people who drink water containing HAA5 in excess of the MCL over many years may have an increased risk of getting cancer.

More information and full 2023 DBP test results are available at: waterandsewer.org/dbps-faqs/. Customers with further questions about this exceedance may call 413-452-1300 or email info@waterandsewer.org.

How do DBPs Form?

DBPs form when chlorine, required for disinfection, interacts with dissolved natural organic matter (NOM). NOM enters Cobble Mountain Reservoir, the main source of the Commission's drinking water supply, through rain and snow runoff from the surrounding forest. The amount of chlorine necessary to maintain safe disinfection to protect against viruses and bacteria is determined by the amount and types of dissolved NOM in the raw water.

NOM levels in the reservoir fluctuate and are impacted by changing weather patterns and more intense, severe storms. In 2023, raw water quality was also impacted by seasonal reservoir turnover, during which the top layer of water mixes with the bottom of the reservoir.

What is the Commission Doing to Address DBPs?

The Commission continues to modify its existing treatment process and system operations to reduce levels of DBPs in the distribution system as much as possible while maintaining safe chlorine levels. In 2015 the Commission initiated a planning process to modernize the existing 1970s-era West Parish Filters Water Treatment Plant to meet today's drinking water regulations and replace end-of-life infrastructure to improve system reliability.

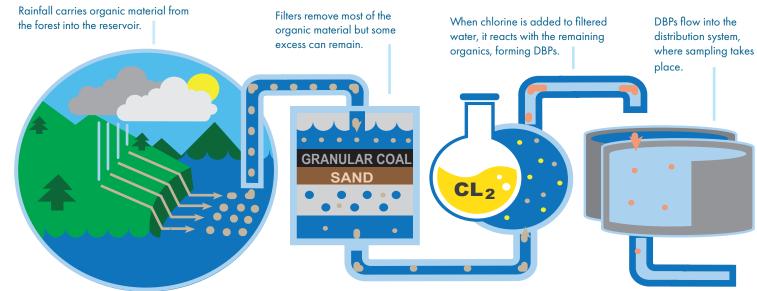
In 2023, the 90% design of the new West Parish Water Treatment Plant was completed. Construction is scheduled to start later in 2024 and be completed in 2028. The new drinking water treatment plant will include the addition of a new treatment step - Dissolved Air Flotation (DAF) – which will remove more NOM from the raw water prior to filtration, limiting the formation of DBPs in the distribution system (see page 2).

Learn more about the new treatment plant on the Commission's website:
waterandsewer.org/new-water-plant.



Watershed streams like this one carry dissolved natural organic matter into Cobble Mountain Reservoir.

Disinfection Byproducts (DBPs) - How Do They Form?



5 breakrast in Downtown Springfield in May 2023.

IMPORTANT WATER INFORMATION INFORMACIÓN IMPORTANTE SOBRE EL AGUA

Este informe contiene información importante acerca de su aqua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

Ce rapport contient des renseignements très importants sur votre eau potable. Veuillez le traduire ou parler à quelqu'un qui le comprend.

Este relatório contém informações muito importantes sobre a sua água potável. Por favor, traduzir ou falar com alguém que entende.

Questo rapporto contiene informazioni molto importanti sulla vostra acqua potabile. Si prega di tradurlo o parlare con qualcuno che lo capisce.

Raport ten zawiera bardzo ważne informacje na temat swojej wody pitnej. Proszę przetłumaczyć lub porozmawiać z kimś, kto go rozumie.

Báo cáo này có chứa thông tin rất quan trọng về nước uống của bạn. Xin vui lòng dịch nó hoặc nói chuyện với một ai đó hiểu nó.

Lead and Drinking Water

Lead is not present in the source water in Cobble Mountain Reservoir or treated water entering the distribution system. The most common sources of lead poisoning are paint and dust containing lead. In cases where lead is detected in drinking water, it is usually due to leaching from pipes that contain lead, such as lead service lines, or plumbing, fixtures, or solder in the home/building plumbing. Leaching is most likely to occur when the water is not moving, generally overnight or at other times when water is not used for several hours.

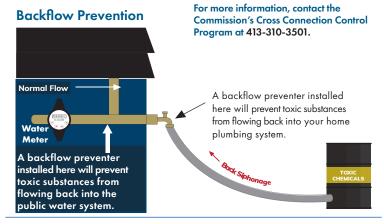
In 1992 the Commission began to proactively remove lead service lines from the distribution system. As of November 2005, all known lead service lines have been removed and replaced. The Commission is also proactively replacing all known galvanized service lines to comply with forthcoming revised regulations. At the treatment plant, water is treated with orthophosphate and sodium hydroxide to inhibit the corrosion of home/building plumbing and to help prevent lead from leaching into water. Testing for the presence of lead and copper is regulated under EPA's Lead and Copper Rule. Testing takes place in three-year cycles.

Cross Connection Control Program

A cross connection is formed at any point where a drinking water line connects to a polluted source, such as boilers, air conditioning systems, fire sprinkler systems, irrigation systems, laboratory equipment, plating tanks, or chemical vats. In residences, a common cross connection is a garden hose attached to a fertilizer or chemical sprayer container, or a hose inserted into a pool. If water pressure drops, perhaps due to nearby fire hydrant use or a water main break, the resulting vacuum can pull pollutants back into the water system. To prevent contamination through cross connections:

- Never submerge a hose in soapy water buckets, pet watering containers, pools, tubs, sinks, drains, or chemicals.
- Never attach a hose to a chemical sprayer without a backflow preventer.
- Install an inexpensive hose connection vacuum breaker on every threaded water fixture; Buy appliances/equipment with a backflow preventer.

If you are an owner of industrial, institutional, or commercial property, you must have your facility's internal plumbing surveyed for cross connection hazards, install proper backflow devices, or eliminate cross connections entirely.



Health Risks of Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Commission is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at http://www.epa.gov/safewater/lead.

LEAD AND COPPER SAMPLING TABLE - 2021

| SUBSTANCE | MCLG | ACTION LEVEL (AL) | 90th PERCENTILE SAMPLE | SAMPLING SITES EXCEEDING THE ACTION LEVEL | VIOLATION | MAJOR SOURCES IN DRINKING WATER |
|--------------|------|----------------------|---------------------------|---|-----------|---|
| Copper (ppm) | 1.3 | AL = 1.3 | 0.0909 | 0 out of 50 | No | Corrosion of household plumbing systems |
| Lead (ppb) | 0 | AL = 15.0 | 0 | 2 out of 50 | No | |

The above table represents the latest round of lead and copper sampling that took place in the summer of 2021. The next required round of lead and copper sampling will take place in the summer of 2024 per regulatory requirements.

AL (Action Level) - The concentration of a contaminant that if exceeded, triggers treatment or other requirements that a water system must follow.

90th Percentile - Out of every 10 homes sampled, 9 were at or below this level.

MCL (Maximum Contaminant Level) - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

MCLG (Maximum Contaminant Level Goal) - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.