CROSS CONNECTION PROGRAM

Protecting Our Water System From Contamination

A cross connection is a connection between a water supply pipe and a source of contamination. Examples of cross connections include hose ends submerged in pools, hot tubs or buckets, irrigation systems and most hose-end spray applicators. Cross connections are extremely dangerous because they provide opportunities for contaminated fluids to be pulled back into the water system.

To protect our water supply, avoid using hose-end sprayers and maintain an air gap by keeping the hose end above the water surface when filling containers. Irrigation systems are required to have a backflow assembly. Backflow assemblies require a plumbing permit, must be inspected by a cross connection specialist, and must be tested by a certified tester when installed, and yearly thereafter. For more information or a list of certified testers, see the City’s website at www.auburnwa.gov/services/utilities/water.htm or call the Water Division at 253-931-3048.

DEFINITIONS

MCLG | Maximum Contaminant Level Goal
The highest level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

MCL | Maximum Contaminant Level
The highest level of a contaminant allowed in drinking water. MCL's provide for protection of public health.

MRDL | Maximum Residual Disinfectant Level
The highest level of a disinfectant allowed in drinking water. MRDL's are set to ensure that water is adequately disinfected.

MRDLG | Maximum Residual Disinfectant Goal
The level of a drinking water disinfectant below which there is no known or expected risk to health.

AL | Action Level
The concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

TT | Treatment Technique
Turbidity is a measurement of the cloudiness of the water and has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth.

UNIT DESCRIPTION

NA: Not applicable
ND: Not detected
NTU: Nephelometric Turbidity Units
ppm: parts per million, or milligrams per liter (mg/l)
nl: nanoliters
ppb: parts per billion, or micrograms per liter (µg/l)

TURBIDITY

MCLG | MCL | Average | Range
--- | --- | --- | ---
NA | 7T | 0.020 - 0.050

DEFINITIONS

PARAMETER | STANDARDS | SAMPLE RESULTS | ADDITIONAL INFORMATION
--- | --- | --- | ---
Turbidity | MCLG | MCL | Average | Range
--- | --- | --- | ---
NA | 7T | 0.020 - 0.050
--- | --- | --- | ---
Arsenic (ppb) | 10 | 10 | ND | 2.4
--- | --- | --- | ---
Nitrate (ppm) | 10 | 10 | ND | 0.2 - 3.4
--- | --- | --- | ---
Fluoride (ppm) | 4 | 4 | 0.50 - 1.05
--- | --- | --- | ---
Turbidity (NTU) | NA | 7T | 0.020 - 0.050
--- | --- | --- | ---
VOLATILE ORGANIC SUBSTANCE

TOTAL HALOGENATED CARBON HYDROCARBONS (ppb)

MCLG | MCL | Average | Range
--- | --- | --- | ---
None | 60 | 1.1 - 6.9

TURBIDITY

Benzene (ppb) | NA | 80 | 1.7 - 15.0

MCLG | MCL | Average | Range
--- | --- | --- | ---
None | 0.50 - 1.05

TURBIDITY

MCLG | MCL | Average | Range
--- | --- | --- | ---
NA | 7T | 0.020 - 0.050

TURBIDITY

MCLG | MCL | Average | Range
--- | --- | --- | ---
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TURBIDITY

REQUIREMENT HEALTH INFORMATION FROM THE EPA

HEALTH ISSUES

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.

The sources of drinking water (both tap water and bottled water) include rivers, lakes, reservoirs, wells, and ground water. The sources of water for most suitable for human consumption, but it can become contaminated on its way to you. Some human activities that can contribute to water pollution include agricultural runoff, industrial discharges, and urban stormwater runoff.

The City of Auburn is committed to efficiently managing the water distribution system to minimize water loss and to monitor water quality, including lead and copper levels. The City of Auburn does not add fluoride to your drinking water. The City purchased water from Tacoma Public Utilities which adds fluoride to the water system. This water mixes with the City of Auburn’s water, but cannot control the variety of materials used in its customers’ plumbing components. When your water has been sitting for several hours, you can reduce the potential for lead exposure by flushing your tap for thirty seconds to two 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 at 800-426-4791 or at www.epa.gov/safewater/lead.

WATER USE EFFICIENCY

The main components of the City of Auburn Water Use Efficiency (WUE) program are managing the water distribution system to minimize water loss, and encouraging responsible use of water by our customers.

Water loss is the difference between the total water produced and the water used by our customers, presented here as a percentage of water produced. The City of Auburn Water Utility goal since 1999 has been to maintain water loss at or below 10 percent. In accordance with the Water Use Efficiency reporting requirements, the three year average for the years up to and including 2017 was 4.9%. In an effort to limit water loss, the Utility performs annual system leak detection and repair; tests production and service meters, calibrating or replacing them as required; and issues permits for water withdrawal from hydrants.

Responsible water use by our customers is promoted by the Utility through educational programs for school children and homeowners. Quantifying the benefit of educational programs and corresponding behavioral changes is difficult, but reductions in water use and/or waste can have a significant impact on the amount of water used as a whole. The City of Auburn is committed to efficiently managing the water distribution system and encourages you to use water wisely.

The City’s Water Use Efficiency Annual Performance Report and other information regarding Auburn’s Water Use Efficiency program are available on the City of Auburn’s website at www.auburnwa.gov/services/utilities/water.htm.

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Community Development & Public Works Department
City of Auburn
25 W Main Street
Auburn WA 98001-4998

The Auburn Water Utility is proud to present you with our 2017 Water Quality Report.

This report is a snapshot of 2017 water quality. The test results in this report show that Auburn's water meets or surpasses all federal and state standards for public drinking water. Auburn's water comes from a combination of wells drawing water from deep below the city, springs located near the walls of the valley and surface water from Tacoma Public Utilities. Water from the valley wells, springs and Tacoma is distributed to the entire Auburn service area. Additional wells are located in Lakeland Hills and serve Auburn customers in that neighborhood.

Auburn provides water to its customers from 4 active wells and 2 springs located in the Valley. Auburn customers in Lakeland Hills get their water from 3 wells in that area. The wells are 290 to 750 feet deep and produce from 180 to 3,500 gallons per minute (gpm) of water. The Springs produce from 600 to 3,800 gpm of water. To supplement the demand in Lakeland Hills, water from the Valley is also provided to from the Terrace View Pump Station located at Alexander Place and Terrace View Drive SE.

Auburn has connections to the regional water supply provided by Tacoma. Water from melted snowpack is stored behind the Howard Hansen Dam and treated and conveyed to Tacoma by a 60-inch diameter pipe. In 2017, Auburn purchased some water from Tacoma during a few hot days in July and August.

Auburn also provides all of the water supply to the City of Algona under a wholesale agreement between the two cities.

Upgrades completed in 2017 at West Hill Springs to improve the chlorination system and piping will enable the City to operate West Hill Springs with greater reliability and better protection of public health.

In 2017, the City's Fulmer Well Field was restored to full production. Over the past five years, the City cleaned and rehabilitated the two wells (Wells 2 and 6), performed water quality studies of the aquifer, cleaned and rehabilitated the aeration towers that adjust the pH of the water for corrosion control, cleaned the clearwell that stores the treated water, installed new booster pumps in the clearwell, installed new variable speed pumps and new flow meters for Wells 2 and 6, and upgraded the Supervisory Control and Data Acquisition (SCADA) system that controls all of those and other components of the system. With the completion of this project, the City expects that all of Auburn's water supply needs for the next decade will be met with Auburn's own water sources, without the need to purchase more expensive regional surface water.

Water quality is generally very good and requires minimal treatment and the water is soft to moderately hard. Water from wells and springs is aerated for pH adjustment through two corrosion control facilities, then chlorine is added for disinfection. Auburn does not add fluoride to its water. Fluoride is a naturally-occurring element in groundwater, and is detected at levels up to 0.2 parts per million (ppm) in Auburn's sources. In 2017, the few days during the summer when water was purchased from Tacoma, its water had fluoride levels ranged from 0.50 to 1.05 ppm. The amount of fluoride in the water depends on the location within the distribution system. Visit the City's website at www.auburnwa.gov/services/utilities/water.htm for the latest map showing fluoride levels throughout the City.

Although most wells and springs are in the Valley, water storage tanks/reservoirs are generally located at the highest elevation in the hills so that they can provide water by gravity to our customers. Auburn has 8 reservoirs with a total storage capacity of 15.8 million gallons.

Auburn has 9 pump stations that pump water from the Valley up to the hills to the reservoirs, and boost it to higher elevations and pressure on the hills. Auburn also has 36 Pressure Reducing Valve (PRV) stations to keep the pressure in the water mains at acceptable levels. These PRVs are located at various elevations in the hills. About 285 miles of water main ranging from 4 inches to 30 inches in diameter deliver water to homes and businesses throughout Auburn. A portion of Auburn’s distribution system is more than 50 years old. Most of these pipes are made of cast iron and can become brittle with age. Auburn has an ongoing program of evaluating and upgrading its water mains to ensure its distribution system is reliable and well maintained.