

2010 Annual Water Quality Report




PENNSYLVANIA
AMERICAN WATER



Home Water
PWS ID: PA1150166

This report contains important information about your drinking water. If you do not understand it, please have someone translate it for you.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

President's Message to Customers

A Message from the Pennsylvania American Water President

Pennsylvania American Water is proud to be your local water company. Our business revolves around water, and sharing information with customers about the quality of your drinking water is a responsibility that we take very seriously.

I am pleased to present this 2010 Annual Water Quality Report, with detailed information about the source and quality of your water. We have prepared this report using the data from water quality testing conducted for your local water system through December 2010. You'll find that we supply water that surpasses or meets all federal and state water quality regulations.

Just as important, we firmly believe in serving as stewards of our environment. You will find Pennsylvania American Water employees supporting and volunteering in community activities across the state, including helping to protect watersheds and educating the public about wise water use. Learn more about these programs on our website at www.pennsylvaniaamwater.com.

I am also proud to note that our parent company American Water celebrates its 125th anniversary this year. We are part of a long-standing American tradition of quality service. American Water is the largest investor-owned water and wastewater utility in the country. You can celebrate this milestone with us by visiting www.amwater125.com to learn more about the history of water service delivery in America and pledge to help the planet by drinking tap water.

Our dedicated, experienced employees deliver more than just water. The service we provide is critical to public health, fire protection, jobs and economic opportunity, and overall quality of life - all at a cost of about a penny per gallon.

For more information or for additional copies of this report, please contact our customer service center at 1-800-565-7292. You can also view an electronic version of this report on our website.

Sincerely,

Kathy L. Pape

Our Mark of Excellence

Founded in 1886, American Water is the largest investor-owned U.S. water and wastewater utility company. With headquarters in Voorhees, N.J., the company employs more than 7,000 dedicated professionals who provide drinking water, wastewater and other related services to approximately 15 million people in more than 30 states, as well as parts of Canada. More information can be found by visiting www.amwater.com.

Pennsylvania American Water, a wholly owned subsidiary of American Water (NYSE: AWK), is the largest investor-owned water utility in the state, providing high-quality and reliable water and/or wastewater services to approximately 2.2 million people.

We are once again proud to present our annual water quality report. This edition covers all testing completed from January through December 2010. Over the years, we have dedicated ourselves to producing drinking water that meets or surpasses all state and federal drinking water standards. We continually strive to adopt new and better methods of delivering the best quality drinking water to you. As regulations and drinking water standards change, it is our commitment to you to incorporate these changes system-wide in an expeditious and cost-effective manner, while maintaining our objective of providing quality drinking water at an affordable price.

We are pleased to tell you that our compliance with all state and federal drinking water laws remains exemplary. To that end, we remain vigilant in meeting the challenges of source water protection, water conservation, and community education while continuing to serve the need of all our water users.

For more information about this report, or for any questions relating to your drinking water, please feel free to call our Customer Service Department at 800-565-7292.

Source Water Information

The Schuylkill River and three groundwater sources (Wells 1, 3, and 4) are the sources of water supply for the Home Water service area. Pennsylvania American Water operates and maintains a treatment facility on the Schuylkill River capable of processing a maximum of 3.7 million gallons of water per day (MGD). In addition, about 15.5% of the total water distribution was purchased from the Norristown water system. The water quality data in this report reflects the water produced at the Home Water and Norristown Water Treatment Plants. The primary source water for the Home Water and Norristown water systems is the same, the Schuylkill River. Only about 1.5% of the total water was purchased from Phoenixville Water Authority of the Borough of Phoenixville which is not represented in this report. The processed water supply is distributed for residential, commercial, and industrial use.

Protecting Your Water Source

The Pennsylvania Department of Environmental Protection (DEP) and PAW completed an assessment for the drinking water sources for the Home Water system in 2002. It was found that the Schuylkill River is susceptible to chemical and petroleum spills; discharges from septic systems and wastewater treatment plants; storm water run-off from roads and parking areas; fecal contamination from waterfowl; above-ground and underground storage tank leakage; run-off from acid mine drainage in the upper watershed.

A copy of the completed Source Water Assessment may be viewed by calling the local office of the Pennsylvania DEP at 484-250-5900. PAW encourages you to take an active part in protecting your water supply by participating in local activities as they occur in your local area.

Other Water Quality Parameters of Interest

Is there lead in your 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. Home Water 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 or at <http://www.epa.gov/safewater/lead>.

Is there fluoride in your water?

PAW does not add fluoride to your water system.

How hard is your water?

Hardness is a measure of the concentration of two minerals naturally present in water - calcium and magnesium. High hardness levels cause soap not to foam as easily as it would at lower levels. Hardness levels range from 103 ppm to 257 ppm, or 6 to 15 grains per gallon of water.

How much sodium is in your water?

The sodium level is in the range, 16 to 61 ppm.

What is the pH (acidity) range of your water?

Water in the distribution system averages 7.1 pH units. A pH of 7.0 is considered neutral, neither acidic nor basic.

ABOUT A PENNY

Did you know that you pay about a penny for a gallon of tap water?

We invest millions of dollars each year in our treatment and distribution facilities to ensure that you receive quality, reliable water service around the clock. At the same time, you pay about a penny per gallon. For most customers, the water bill is the lowest utility bill they pay each month.

That's an exceptional value.

WE CARE ABOUT WATER. IT'S WHAT WE DO.

Partnership for Safe Drinking Water Program

In 2010 the Home Water system participated in the Partnership for Safe Water program sponsored by the U.S. Environmental Protection Agency (EPA), Pennsylvania Department of Environmental Protection (DEP) and other water-related organizations. This voluntary national program assesses the performance of surface water filtration plants. The results of this evaluation are then used to improve operations, so that we continue to provide the highest quality water we can deliver at a reasonable cost.



EPA Public Notice for PAW Administrative Orders – Home Water System

Notice Required under the Stage 2 DBP Rule

During 2009, our Home Water system was required to complete a system evaluation to characterize disinfection by-products (DBPs) in our distribution system and identify the best places to monitor starting in the fourth quarter of 2013 as required by the Stage 2 Disinfection By-Product regulation. Although our report was submitted on time, the Federal United States Environmental Protection Agency (USEPA) in a letter sent to Pennsylvania American Water on April 26, 2010, deemed the document to be deficient in meeting all of the regulatory requirements. Although this incident did not affect the quality of your water, as our customers, you have the right to know what happened and what we did to correct this situation.

There is nothing that you need to do. The quality of your drinking water was not compromised at any time. All disinfection by-product samples were collected according to all regulatory requirements and were properly reported within all established deadlines.

Pennsylvania American Water worked with the USEPA to correct any deficiencies in the original report. The Home Water system operations staff sent any additional information requested by USEPA back on June 14, 2010. Pennsylvania American Water received a letter from the USEPA on July 23, 2010, that our plan was approved. This issue has now been resolved.

Please share this information with all the other people who drink this water, especially those who may have not 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.

For more information, please contact Sandy Weiss, Water Quality Supervisor, at (610)-292-3519.

How to Contact Us

Additional copies of this report can be obtained by calling our Customer Service Department at 800-565-7292. Electronic copies of this document can be obtained by logging onto our website at www.pennsylvaniaamwater.com. Additional information can be gathered by calling our Customer Service Department or by viewing information on the Internet:

Pennsylvania American Water

www.pennsylvaniaamwater.com

Pennsylvania Department of Environmental Protection

www.dep.state.pa.us

United States Environmental Protection Agency

www.epa.gov/safewater

Safe Drinking Water Hotline: (800) 426-4791

Centers for Disease Control and Prevention

www.cdc.gov

American Water Works Association

www.awwa.org

Substances Expected to be in Drinking Water

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration (FDA) regulations also establish limits for contaminants in bottled water, which must provide the same protection for public health. Pennsylvania American Water's treatment processes are designed to reduce any such substances to levels well below any health concern and the processes are controlled to provide maximum protection against microbial and viral pathogens which could be naturally present in surface and groundwater. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. 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 at (800) 426-4791.

Cryptosporidium is a microbial pathogen found in surface water throughout the US. Although Cryptosporidium can be removed through commonly-used filtration methods, US EPA issued a new rule in January 2006 that requires systems with higher Cryptosporidium levels in their source water to provide additional treatment. In anticipation of this upcoming rule, the Home Water system monitored for Cryptosporidium in its raw water in 2005 and 2006. Test results do not show a need to provide additional treatment.

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 may 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 EPA's Safe Drinking Water Hotline (800) 426-4791.

The source of drinking water (both tap water and bottled water) includes 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, may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

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

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

Organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, may also come from gas stations, urban storm water runoff, and septic systems.

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

Arsenic

While your drinking water meets the U.S. Environmental Protection Agency's standard for arsenic, it does contain low levels of arsenic. The EPA's standard balances the current understanding of arsenic's possible health effects against the cost of removing 100% of arsenic from drinking water. The EPA continues to research the health effects of low levels of arsenic, which is a naturally-occurring mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Nitrate

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.

Chloramine Treatment

Chloramines are a Pennsylvania DEP and EPA approved alternate disinfectant to free chlorine for water disinfection. Chloramines minimize the formation of regulated disinfection by-products. Another benefit of chloramines is improved taste of the water as compared with free chlorine. The western service area of our system uses chloramines for disinfection. Chloramines are also used by many other water utilities nationally. Chloramines have the same effect as chlorine for typical water uses with the exception that chloramines must be removed from water used in kidney dialysis and fish tanks or aquariums. Treatments to remove chloramines are different than treatments for removing chlorine. Please contact your physician or dialysis specialist for questions pertaining to kidney dialysis water treatment. Contact your pet store or veterinarian for questions regarding water used for fish and other aquatic life.

Radon

Radon is a radioactive gas that you cannot see, taste, or smell. It is found throughout the United States. Radon can move up through the ground and into a home through cracks and holes in the foundation. It can build up to high levels in all types of homes. Radon can also mix with indoor air when released from tap water during showering, washing dishes, and other household activities. Compared to radon entering your home through soil, the radon entering the home from tap water will in most cases be a low level source. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also increase your risk of stomach cancer. If you are concerned about radon in your home, have the air in your home tested. Testing is inexpensive and easy. Fix your home if the level of radon in your air is 4 picocuries per liter of air or higher. There are simple ways to remediate a radon problem that are not too costly. For additional information, call the Pennsylvania Radon Division Hotline at 800-237-2366 or call EPA's Radon Hotline (800) SOS-RADON.

How to Read This Table

Starting with a **Substance**, read across. **Year Sampled** is usually in 2009 or the year prior. **MCL** shows the highest level of each substance (contaminant) allowed. **MCLG** is the goal level for that substance (goal may be set lower than what is allowed). **Average Amount Detected** represents the measured amount (less is better). **Range** tells the highest and lowest amounts measured. A **Yes** under **Compliance Achieved** means the amount of the substance met government requirements. **Typical Source** tells where the substance usually originates.

Non-regulated substances are measured, but maximum allowed contaminant levels have not been established by the government. These contaminants are shown for your information.

Definitions of Terms Used in This Report

- **AL (Action Level):** The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.
- **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.
- **MRDL (Maximum Residual Disinfectant Level):** The highest level of 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 drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.
- **NA:** Not applicable
- **ND:** Not detected
- **NTU (Nephelometric Turbidity Units):** Measurement of the clarity, or turbidity, of the water.
- **pCi/L (picocuries per liter):** Measurement of the natural rate of disintegration of radioactive contaminants in water (also beta particles).
- **ppm (parts per million):** One part substance per million parts water, or milligrams per liter.
- **ppb (parts per billion):** One part substance per billion parts water, or micrograms per liter.
- **SS:** Single sample
- **TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.
- **%:** - means percent.
- **>:** - means greater than.
- **<:** - means less than.

Water Quality Statement

We are pleased to report that during the past year, the water delivered to your home or business complied with all state and federal drinking water requirements. For your information, we have compiled a list in the table below showing what substances were detected in your drinking water during 2010. The Pennsylvania DEP allows us to monitor for some contaminants, less than once per year, because the concentration of the contaminants does not change frequently. Some of our monitoring results, though representative, are more than one year old. Although all of the substances listed below are below the Maximum Contaminant Levels (MCL) set by the U.S. Environmental Protection Agency and the Pennsylvania DEP, we feel it is important that you know exactly what was detected and how much of each substance was present in the water.

Water Quality Results

Turbidity - A Measure of the Clarity of the Water at the Shady Lane Treatment Plant								
Plant	Substance (units)	Year Sampled	MCL	MCLG	Highest Single Measurement	Compliance Achieved	Typical Source	
Shady Lane Treatment Plant	Turbidity (NTU) ^a	2010	TT ^a	NA	0.11	Yes	Soil runoff	
^a All turbidity readings were below the treatment technique requirement of 0.3 NTU (or 0.5) NTU in 95% of all samples taken for compliance on a monthly basis.								
Regulated Substances - Measured on the Water Leaving the Treatment Facilities								
Substance (units)	Year Sampled	MCL	MCLG	Average Amount Detected	Range Low-High	Compliance Achieved	Typical Source	
Barium (ppm)	2007	2	2	0.17	0.05 - 0.35	Yes	Discharge of drilling waste; Discharge from metal refineries; Erosion of natural deposits	
Selenium (ppb)	2007	50	50	1	ND - 2	Yes	Discharge from mines; Discharge from metal refineries; Erosion from natural deposits	
Fluoride (ppm)	2007	2	2	0.02	ND - 0.1	Yes	Erosion of natural deposits; Water additive which promotes strong teeth	
Mercury (ppb)	2007	2	2	0.12	ND - 0.5	Yes	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland	
Copper (ppm)	2007	1.3	1.3	0.01	ND - 0.01	Yes	Corrosion of household plumbing systems; Erosion of natural deposits.	
Lead (ppb)	2007	15	0	0.5	ND - 2	Yes	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives	
Arsenic (ppb)	2009	10	0	2.3	ND - 5	Yes	Erosion of natural deposits; Runoff from glass and electronic production waste	
Atrazine (ppb)	2010	3	3	0.6	ND - 2.3	Yes	Runoff from herbicide used on row crops	
Nitrate-N (ppm)	2010	10	10	4.63	1.93 - 6.73	Yes	Runoff from fertilizer use; Leaching from septic tanks; Discharge of untreated wastewater; Erosion of natural deposits	
Other Regulated Substances - Measured from the Water in the Home Water Distribution System								
Substance (units)	Year Sampled	MCL	MCLG/MRDL	Average Amount Detected	Range Low-High	Compliance Achieved	Typical Source	
Total Trihalomethanes (ppb)	2010	80	NA	51.3	ND - 104.9*	Yes	By-product of drinking water chlorination	
Haloacetic Acids (HAA5) (ppb)	2010	60	NA	18.5	ND - 58.9*	Yes	By-product of drinking water chlorination	
Free Chlorine Residual at Water Plant (ppm)**	2010	NA	4	0.51	0.51 - 1.66	Yes	Added as a disinfectant to the treatment process	
Total and Free Chlorine Residual in Distribution System (ppm)**	2010	NA	4	1.39	0.77 - 1.39	Yes	Added as a disinfectant to the treatment process	
* Range represents sampling at individual sample points.								
** MRDL (maximum residual disinfectant level) applies.								
Regulated Substances - Measured on the Water Leaving the Well Stations								
Substance (units)	Year Sampled	MCLG/MRDL	Minimum Disinfectant Residual	Lowest Level Detected	Range of Detections	Violation Y/N	Typical Source	
Free Chlorine Residual at Entry Point 102 (ppm)*	2010	4	0.80	0.80	0.80 - 1.79	No	Added as a disinfectant to the treatment process	
Free Chlorine Residual at Entry Point 103 (ppm)*	2010	4	0.70	0.71	0.71 - 1.57	No	Added as a disinfectant to the treatment process	
Free Chlorine Residual at Entry Point 104 (ppm)*	2010	4	0.40	0.43	0.43 - 1.63	No	Added as a disinfectant to the treatment process	
* MRDL (maximum residual disinfectant level) applies.								
Total Organic Carbon Removal - Measured at the Shady Lane Treatment Plant								
Substance (units)	Year Sampled	TT	Range of % Removal Required	Range of % Removal Achieved	Compliance Achieved	Typical Source		
Total Organic Carbon (TOC) (% removal)*	2010	Meet EPA Removal Requirements	15 - 35	21 - 56	Yes	Naturally decaying vegetation		
* Adequate removal of TOC may be necessary to control the unwanted formation of chlorinated by-products. Naturally occurring organic matter present in the source water can react with the disinfectants used at the treatment facility to form these by-products.								
Bacterial Results - Measured from the Home Water Distribution System								
Substance (units)	Year Sampled	MCL	MCLG	Highest Percentage Detected	Compliance Achieved	Typical Source		
Total Coliforms (% of positive samples)	2010	No more than 5% of the monthly samples can be positive	Zero bacteria	2.0	Yes	Naturally present in the environment		
Lead and Copper Results - Tap Water Test Results from Home Water Distribution System								
Substance (units)	Year Sampled	Action Level	MCLG	Results	Number of Samples	90th Percentile	Samples Above Action Level	Typical Source
Lead (ppb)	2010	15	0	NA	30	7	1	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	2010	1.3	1.3	NA	30	0.29	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Non-Regulated Substances - Measured on the Water Leaving the Treatment Facility								
Substance (units)	Year Sampled	Highest Level Detected	Range Low-High	Typical Source				
Radon (pCi/L)	2007	1227	451 - 1227	Naturally occurring				

The following data set is from the Norristown Water System for the purchased water:

Turbidity - A Measure of the Clarity of the Water at Norristown Water Treatment Facility

Plant	Substance (units)	Year Sampled	MCL	MCLG	Highest Single Measurement	Compliance Achieved	Typical Source
Norristown Plant	Turbidity (NTU) ¹	2010	TT	NA	0.17	Yes	Soil runoff

¹ All turbidity readings were below the treatment technique (TT) requirement of 0.3 (or 0.5) NTU in 95% of all samples taken for compliance on a monthly basis. Treatment technique requirement was met.

Regulated Substances - Measured on the Water Leaving Norristown Water Treatment Facility

Substance (units)	Year Sampled	MCL	MCLG	Highest Amount Detected	Range Low-High	Compliance Achieved	Typical Source
Selenium	2007	50	50	3	SS	Yes	Discharge from mines; Discharge from metal refineries; Erosion from natural deposits
Copper (ppm)	2007	1.3	1.3	0.06	SS	Yes	Corrosion of household plumbing; Erosion of natural deposits; Leaching from wood preservatives
Di(2-ethylhexyl) phthalate (ppb)	2010	6	0	0.7	ND - 0.7	Yes	Discharge from rubber and chemical factories
Nitrate-N (ppm)	2010	10	10	2.0	SS	Yes	Runoff from fertilizer use; Leaching from septic tanks; Discharge from sewage plants; Erosion of natural deposits

Total Organic Carbon Removal - Measured at Norristown Water Treatment Facility

Substance (units)	Year Sampled	TT	Range of % Removal Required	Range of % Removal Achieved	Compliance Achieved	Typical Source
Total Organic Carbon (TOC) (% removal) [*]	2010	Meet EPA Removal Requirements	15 - 35	46 - 60	Yes	Naturally decaying vegetation

^{*} Adequate removal of TOC may be necessary to control the unwanted formation of chlorinated by-products. Naturally occurring organic matter present in the source water can react with the disinfectants used at the treatment facility to form these by-products.

Bacterial Test Results - Measured from Norristown Water Distribution System

Substance (units)	Year Sampled	MCL	MCLG	Highest Percentage Detected	Compliance Achieved	Typical Source
Total Coliform (% of positive samples)	2010	No more than 5% of the monthly samples can be positive	Zero bacteria	2.2	Yes	Naturally present in the environment

Lead and Copper - Tap Water Test Results from Norristown Water Distribution System

Substance (units)	Year Sampled	Action Level	MCLG	Number of Samples	90th Percentile	Samples Above Action Level	Compliance Achieved	Typical Source
Lead (ppb)	2010	15	0	30	2	1	Yes	Corrosion of household plumbing systems; Erosion of natural deposits
Copper (ppm)	2010	1.3	1.3	30	0.2	0	Yes	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

Other Regulated Substances - Measured from Water in Norristown Water Distribution System

Substance (units)	Year Sampled	MCL	MCLG/MRDL	Results	Range Low-High	Compliance Achieved	Typical Source
Total Trihalomethanes (ppb)	2010	80	NA	50.0	13.9 - 115.7 [*]	Yes	By-product of drinking water chlorination
Haloacetic Acids (HAA5) (ppb)	2010	60	NA	6.2	ND - 16.1 [*]	Yes	By-product of drinking water chlorination
Total Chlorine Residual at Water Plant (ppm) ^{**}	2010	NA	4	0.40	0.40 - 1.80	Yes	Added as a disinfectant to the treatment process
Total Chlorine Residual in Distribution System (ppm) ^{**}	2010	NA	4	1.14	0.62 - 1.14	Yes	Added as a disinfectant to the treatment process

^{*} Range represents sampling at individual sample points.

^{**} MRDL (maximum residual disinfectant level) applies.