

# 2012 Annual Drinking Water Quality Report

(Consumer Confidence Report)

City of Manor – Pws # 2270002

512-272-5555

## ***Special Notice for the ELDERLY, INFANTS, CANCER PATIENTS, people with HIV/AIDS or other immune problems:***

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly, or immunocompromised persons such as those undergoing chemotherapy for cancer; those who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune system disorders can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care provider. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline at (800)426-4791

## **Public Participation Opportunities**

**Date:** Council meetings are scheduled for the third Wednesday of every month.

**Time:** 7:00 pm

**Location:** 201 E. Parson Street  
Manor, TX 78653

**Phone No:** (512) 272 – 5555

To learn about future public meetings (concerning your drinking water), or to request to schedule one, call us.

## **OUR DRINKING WATER IS REGULATED**

This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

**SOURCES OF DRINKING WATER:** The 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 before treatment include:

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

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

**Pesticides and herbicides**, which 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, and can also come from gas stations, urban storm water runoff, and septic systems.

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

## **En Español**

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en español, favor de llamar al

**tel. (512) 272 -5555**

para hablar con una personal bilingüe en español.

## Where do we get our drinking water?

Our drinking water is obtained from ground water sources. It comes from the Colorado River Alluvium Aquifer. Water is purchased from the Manville Wsc. water is surface and groundwater, Blue Water water is groundwater and the City of Pflugerville water is surface water from Lake Pflugerville. A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in this assessment will allow us to focus on our source water protection strategies. Future details about source water assessment information are available in Drinking Water Watch at the following URL

<http://dww.tceq.state.tx.us/DWW/>. For more information on source water assessments and protection efforts at our system, please contact us.

## ALL drinking water may contain contaminants.

When drinking water meets federal standards there may not be any health benefits to purchasing bottled water or point of use devices. 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 Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791). In order to ensure that tap water is safe to drink, EPA prescribes regulation which limit the amount of certain contaminants' in water provided by public water systems. FDA regulations establish limits for contaminants in bottle water which must provide the same protection for public health.

## Secondary Constituents

Many constituents (such as calcium, sodium, or iron) which are often found in drinking water can cause taste, color, and odor problems. The taste and odor constituents are called secondary constituents and are regulated by the State of Texas, not EPA. These constituents are not causes for health concerns. Therefore, secondary constituents are not required to be reported in this document, but may greatly affect the appearance and taste of your water.

## About the Following Pages

The pages that follow list all of the federally regulated or monitored constituents which have been found in your drinking water. U.S. EPA requires water systems to test up to 97 constituents.

## DEFINITIONS

### Maximum Contaminant Level (MCL)

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

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

### Maximum Residual Disinfectant Level (MRDL)

The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants.

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

### Action Level (AL)

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

### Treatment Technique (TT)

A required process intended to reduce the level of a contaminant in drinking water.

**Avg** -Regulatory compliance with some MCLs are based on running annual average of monthly samples.

**ppm** - milligrams per liter or parts per million (mg/L) – or one ounce in 7,350 gallons of water.

**ppb** - micrograms per liter, or parts per billion, (ug/L) – or one ounce in 7,350,000 gallons of water.

**n/a** - not applicable

**Definitions-** The following table contains scientific terms and measures, some of which may require explanation

## ABBREVIATIONS

NTU - Nephelometric Turbidity Units

MFL - million fibers per liter (a measure of asbestos)

pCi/L - picocuries per liter ( a measure of radioactivity)

ppm - milligrams per liter or parts per million (mg/L)

ppb - micrograms per liter, or parts per billion, (ug/L)

ppt - parts per trillion, or nanograms per liter.

ppq - parts per quadrillion, or picograms per liter.

# City of Manor

## 2012 Stage I Watering Restriction

### Schedule:

Odd numbers addresses: Wed. and/or Sat.

Even numbers addresses: Thurs. and/or Sun.

### Commercial/Multifamily

All addresses – Tues. & or Friday

**All Customers - No operation of irrigation systems or hose-end sprinklers between the hours of 10am & 7pm. Hand watering is allowed at anytime.**

## ENFORCEMENT

The persons or entity responsible for water service account where a violation of Ord. #360 occurs shall be presumed responsible for the violation. An offense under Ord. #360 is a Class C Misdemeanor, punishable by:

(a) A fine not exceed \$500; or

(b) If criminal negligence, net to exceed \$2,000. Each instance of a violation of the Ordinance is a separate offense.

## HOW TO READ AND CHECK YOUR WATER METER FOR LEAK

**Reading your water meter:** If you have a billing discrepancy, the first thing you should do is read your water meter. The water meter is in a meter box that is in the ground at the road. Remove the lid from the meter box and lift the lid on the meter itself. Read the white numbers only numbers from left to right. Then compare the reading to the present reading on your water bill. Please contact the office for any assistance. Any customer that feels the meter is to blame for the high usage can have the meter removed and tested at the customer's expense.



**Leak Detection:** The water meter can be a helpful tool in determining if you have a water leak. Many meters are equipped with a small triangle called a leak detector. The leak detector will not turn unless water is going through the meter. Before checking the leak detector, be sure that no water is being used, the leak detector will turn if water is being used. If the leak detector is moving and no water is being used there may be a leak on the private line (customer side of the meter) that must be repaired by a plumber. If the meter is not equipped with a leak detector, read the water meter (also record what number the dial is pointing to), do not use any water and then read it again approximately 30 minutes later without using any water. If the meter reading or the location of the dial has changed, then it is possible there is a private leak. Private leaks occasionally occur and unfortunately, when it happens, water usage and charges can be significantly higher. In this situation, our staff will gladly assist you in setting up a payment plan.

## City of Manor Consumer Confidence Report Data 2012

### Regulated Contaminants

Year or	Contaminant	Highest Level Detected	Range of Level Detected	MCLG	MCL	Violation	Units of Measure	Source of Contaminant Range
2012	Total Haloacetic Acids	4.4	0 – 4.4	No goal for the total	60	N	ppb	By-product of drinking water chlorination.
2012	Total Trihalomethanes	16.9	0 – 16.9	No goal for the total	80	N	ppb	By-product of drinking water chlorination.

### Inorganic Contaminants

Year or	Contaminant	Highest Level Detected	Range of Level Detected	MCLG	MCL	Violation	Units of Measure	Source of Contaminant Range
2009	Barium	0.0757	0.0757 - 0.0757	2	2	N	ppm	Discharge of drilling wastes discharge; from metal refineries; erosion of natural deposits
2012	Fluoride	0.31	0.31 - 0.31	4	4	N	ppm	Erosion of natural deposits; water additive which promote strong teeth; discharge from fertilizer and aluminum factories
2012	Nitrate	1	0.91 - 0.98	10	10	N	ppm	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits.

**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.**

### Radioactive Contaminants

2009	Combined Radium 226 & 228	<0.1	<0.1 - <0.1	0	5	N	pCi/L	Erosion of natural deposits. including pesticides
2009	Gross beta emitters	<4.0	<4.0 - <4.0	0	50	N	pCi/L	Decay of natural and man-made deposits.
2009	Gross alpha	3.2	3.2 - 3.2	0	15	N	pCi/L	Erosion of natural deposits. including pesticides

### Synthetic Organic contaminants including pesticides and herbicides

2012	Altrazine	0.33	0 - 0.33	3	3	N	ppb	Erosion of natural deposits. including pesticides
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### Unregulated Initial Distribution System Evaluation for Disinfection Byproducts WAIVED OR NOT YET SAMPLED

#### Unregulated Contaminants

Bromoform, chloroform, dichlorobromomethane, and dibromochloromethane are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry.

Year or	Contaminant	Highest Level Detected	Range of Level Detected	MCL	MCLG	Violation	Units of Measure	Source of Contaminant Range
2012	Chloroform	1.4	<1.0 – 1.7	N/A	N/A	N/A	ppb	Byproduct of drinking water disinfection
2012	Bromoform	<1.0	<1.0 – 1.0	N/A	N/A	N/A	ppb	Byproduct of drinking water disinfection
2012	Bromodichloromethane	1.2	<1.0 – 1.2	N/A	N/A	N/A	ppb	Byproduct of drinking water disinfection
2012	Dibromochloromethane	1.05	<1.0 – 1.05	N/A	N/A	N/A	ppb	Byproduct of drinking water disinfection

#### Residual Disinfectant Level

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MCL	MRDLG	Unit of Measure	Source of Disinfectant
2012	Chloramine Residual	1.38	0.50	3.90	4.0	< 4.0	ppm	Disinfectant used to control microbes
2012	Chlorine Residual, Free	1.40	0.34	1.99	4.0	< 4.0	ppm	Disinfectant used to control microbes

#### Lead and Copper

**Definitions: Action Level Goal (ALG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety. **Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Sampled	Contaminant	The 90th Percentile	# of Sites over AL	Action Level	MCLG	Violation	Unit of Measure	Source of Contaminant
2012	Lead	3.15	0	15	0	N	ppb	Erosion of natural deposits; Corrosion of household plumbing
2012	Copper	0.636	2	1.3	1.3	N	ppb	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

#### Recommended Additional Health Information for Lead

"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. This water supply 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>."

## Total Coliform

**Total coliform** bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

Year	Contaminant	Highest Monthly % of Positive Samples	MCL	Units of Measure	Source of Contaminant
2012	Total Coliform Bacteria	1	*	Presence	Naturally present in the environment
<b>* Presence of coliform bacteria in 5 % or more of the monthly samples.</b>					
<b>Fecal Coliform REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA</b>					
<b>Violations NONE</b>					

## Secondary and Other Constituents Not Regulated (No associated adverse health effects)

Year or range	Contaminant	Average Level	Minimum Level	Maximum Level	Secondary Level	Units of Measure	Source of Contaminant Range
2009	Bicarbonate	355	355	355	NA	ppm	Corrosion of carbonate rocks such as limestone
2007	Calcium	70.1	35.2	105	NA	ppm	Abundant naturally occurring
2009	Chloride	45	43	47	300	ppm	Corrosion of carbonate rocks such as limestone
2009	Hardness as Ca/Mg	311	306	317	NA	ppm	Naturally occurring calcium and magnesium
2009	pH	7.6	7.2	8	7	units	Measure of corrosivity of water.
2010	Sodium	22.2	18.4	26	NA	ppm	Erosion of natural deposits; byproducts of oil field Activity.
2009	Sulfate	42.5	35	50	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2009	Total Alkalinity as CaCO <sub>3</sub>	225	159	291	NA	ppm	Naturally occurring soluble mineral salts.
2009	Total Dissolved Solids	225	159	291	1000	ppm	Total dissolved mineral constituents in water.
2009	Total Hardness as CaCO <sub>3</sub>	321	152	351	NA	ppm	Naturally occurring calcium.
2007	Zinc	0.0004	0	0.0009	5	ppm	Moderately abundant naturally occurring element used in the metal industry

## Manville WSC Consumer Confidence Report Data 2012

### Regulated Contaminants

Year or	Contaminant	Highest Level Detected	Range of Level Detected	MCL	MCLG	Violation	Units of Measure	Source of Contaminant Range
2011	Barium	0.137	.041-.137	2	2.0	N	ppm	Discharge of drilling wastes Discharge; from metal refineries; Erosion of natural deposits
2011	Fluoride	0.219	.027-.2.19	4	4.0	N	ppm	Erosion of natural deposits; Water additive which promote strong teeth; Discharge from fertilizer and aluminum
2011	Selenium	0.0031	0-0.0031	50	50	N	ppb	Discharge from petroleum and metal. Refineries ;Erosion erosion of natural deposits; Discharge from mines.
2011	Thallium	0.00073	0- 0.00073	0.5	0.5	N	ppb	Discharge from electronics, glass, and Leaching from ore-processing sites; drug factories
2012	Nitrate (measure As nitrogen)	2.04	0.01-2.04	50	50	N	ppb	Runoff from fertilizer use; Leaching from septic tanks sewage; Erosion of natural deposits
2012	Nitrite (measure As nitrogen)	0.13	0-0.013	50	50	N	ppb	Runoff from fertilizer use; Leaching from septic tanks sewage; Erosion of natural deposits
<b>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.</b>								
2011	Beta/photon emitters	5.8	0 - 5.8	0	50	N	pCi/L	Decay of natural and man-made deposits.
2011	Combined Radium 226 & 228	1.6.	< 0.5-1.6	0	5	N	pCi/L	Erosion of natural deposits. including pesticides
2011	Gross beta emitters	5.8	< 4.0 - 5.80	0	50	N	pCi/L	Decay of natural and man-made deposits.
2011	Gross alpha	4.5	< 2.0 - 4.5	0	15	N	pCi/L	Erosion of natural deposits. including pesticides
<b>Synthetic Organic contaminants including pesticides and herbicides</b>								
2012	Altrazine	0.23	0 - 0.23	3	3	N	ppb	Erosion of natural deposits. including pesticides

**Unregulated Initial Distribution System Evaluation for Disinfection Byproducts WAIVED OR NOT YET SAMPLED**

**Unregulated Contaminants**

Bromoform, chloroform, dichlorobromomethane, and dibromochloromethane are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry.

Year or	Contaminant	Highest Level Detected	Range of Level Detected	MCL	MCLG	Violation	Units of Measure	Source of Contaminant Range
2012	Chloroform	13.5	<0.5 - 3.5	N/A	N/A	N/A	ppb	Byproduct of drinking water disinfectio
2012	Bromoform	4.8	<1.0 - 4.8.	N/A	N/A	N/A	ppb	Byproduct of drinking water disinfection
2012	Bromodichloromethane	15.4	<0.5 – 15.4	N/A	N/A	N/A	ppb	Byproduct of drinking water disinfection
2012	Dibromochloromethane	5.8	<1.0 – 13.6	N/A	N/A	N/A	ppb	Byproduct of drinking water disinfection

**Residual Disinfectant Level**

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MCL	MRDLG	Unit of Measure	Source of Disinfectant
2012	Chloramine Residual	1.77	0.56	2.94	4.0	< 4.0	ppm	Disinfectant used to control microbes
2012	Chloraine Residual, Free	1.48	0.58	3.1	4.0	< 4.0	ppm	Disinfectant used to control microbes

**Disinfection Byproducts**

Collection Date	Disinfectants and Disinfection By-Products	Highest Level Detected	Range of Level Detected	MCL	MCLG	Violation	Units of Measure	Source of Contaminant
2012	Total Haloacetic Acids	13.9	1.2 -13.9	No goal for the total	60	N	ppb	By-product of drinking water chlorination.
2012	Total Trihalomethanes	29.5	1.0 -29.5	No goal for the total	80	N	ppb	By-product of drinking water chlorination.

**Lead and Copper**

**Definitions: Action Level Goal (ALG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

**Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Sampled	Contaminant	The 90th Percentile	# of Sites over AL	Action Level	MCLG	Violation	Unit of Measure	Source of Contaminant Measure
2010	Lead	2.82	0	15	0	N	ppb	Erosion of natural deposits; Corrosion of household plumbing
2010	Copper	0.257	0	1.3	1.3	N	ppb	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

**Recommended Additional Health Information for Lead**

"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. This water supply 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>."

**Violations**

Violations Type	Violation Begin	Violation End	Violation Explanation	Steps to Correct Violation
Monitor GWR Triggered/ Major	10/01/2012	10/31/2012	Number of required raw samples not collected.	All raw samples have been collected.

**Health Effects**

**Fecal coliform/E. Coli.** Fecal coliform and E coli are bacteria whose presence indicates that the water may be contaminated with human and animal wastes. Microbes in these water can causes short-term effects, such as diarrhea, cramps, headaches, or other symptoms. They pose a special health risk for infants, young children, and people with severely compromised immune systems.

**\*Secondary and Other Constituents Not Regulated (No associated adverse health effects)**

Year or	Contaminant	Average Level	Minimum Level	Maxium Level	Secondary	Units of Measure	Source of Contaminant Range
2011	Bicarbonate	372.8	259	437	NA	ppm	Corrosion of carbonate rocks suchas limestone.
2011	Calcium	71.85	45.9	118	NA	ppm	Abundant naturally occurring
2011	Carbonate	< 1	< 1	< 1	NA	ppm	Corrosion of carbonate rocks such as limestone.
2011	Chloride	46.2	13	83	300	ppm	Abundant naturally occurring element; used in water purification; by-product of oil field activity.
2010	Copper	0.26	0	1.3	300	ppm	Corrosion of household plumbing systems; erosion of Natural deposits; leaching from wood preservatives.
2010	Hardness as Ca/Mg	101	99	102	NA	ppm	Naturally occurring calcium and magnesium
2011	Iron	0.0838	<0.010	0.208	0.3	ppm	Erosion of natural deposits; iron or steel water delivery

							equipment or facilities.
2011	Magnesium	25.692	24.1	35.7	NA	ppm	Abundant naturally occurring element.
2011	Nickel	0.00266	0.001	0.0048	NA	ppm	Erosion of natural deposits.
2011	P.Alkalinity as CaCO3	<1	<1	<1	NA	ppm	Naturally occurring soluble mineral salts.
2010	pH	7.32	7	7.70	7	units	Measure of corrosivity of water.
2010	Sodium	33.618	9.29	70	NA	ppm	Erosion of natural deposits; byproducts of oil field activity
2011	Sulfate	70	26	170	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2012	Nitrate (measure As nitrogen)	0.13	0- 0.13	1	1	ppm	Runoff from fertilizer use; Leaching from septic tanks sewage; Erosion of natural deposits
2011	Total Alkalinity asCaCO3	305	212	358	NA	ppm	Naturally occurring soluble mineral salts.
2011	Total Dissolved Solids	521	350	752	1000	ppm	Total dissolved mineral constituents in water.
2011	Total Hardness as CaCO 3	321	152	351	NA	ppm	Naturally occurring calcium.
2011	Zinc	0.0268	<0.0050	0.0435	5	ppm	Moderately abundant naturally occurring element used in the metal industry

## Pflugerville Consumer Confidence Report Data 2012

### Inorganic Contaminants

Year or range	Contaminant	Average Level	Minimum Level	Maxium Level	MCL	MCLG	Units of Measure	Source of Contaminant Range
2011	Arsenic	0.002	0.002	0.002	10	0	ppb	Erosion of natural deposits; runoff from orchards from glass and electronics production wastes.
2011	Barium	0.060	0.060	0.060	2	2	ppm	Discharge of drilling wastes discharge; from metal refineries; erosion of natural deposits
2011	Fluoride	0.38	0.34	0.4	4	4	ppm	Erosion of natural deposits; water additive which promote strong teeth; discharge from fertilizer and aluminum factories.
2011	Nitrate	0.57	0.57	0.57	10	10	ppm	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits.
2011	Combined Radium 226 & 228	<0.1	< 0.1	< 0.1	5	0	pCi/L	Erosion of natural deposits. including pesticides
2011	Gross beta emitters	<4.0	< 4.0	<4.0	50	0	pCi/L	Decay of natural and man-made deposits.
2011	Gross alpha	2.0	2.0	2.0	15	0	pCi/L	Erosion of natural deposits. including pesticides

### Synthetic Organic contaminants including pesticides and herbicides

2012	Altrazine	<0.1	< 0.1	< 0.1	3	3	ppb	Erosion of natural deposits. including pesticides
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### Unregulated Initial Distribution System Evaluation for Disinfection Byproducts WAIVED OR NOT YET SAMPLED

#### Unregulated Contaminants

Bromoform, chloroform, dichlorobromomethane, and dibromochloromethane are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry.

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Units of Measure	Source of Contaminant
2012	Chloroform	1.4	<1.0	1.7	ppb	Byproduct of drinking water disinfection
2012	Bromoform	<1.0	<1.0	<1.0	ppb	Byproduct of drinking water disinfection
2012	Bromodichloromethane	1.2	<1.0	1.2	ppb	Byproduct of drinking water disinfection
2012	Dibromochloromethane	1.05	<1.0	1.1	ppb	Byproduct of drinking water disinfection

### Residual Disinfectant Level

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MCL	MRDLG	Unit of Measure	Source of Disinfectant
2012	Chloramine Residual	1.47	0.5	3.6	4.0	< 4.0	ppm	Disinfectant used to control microbes

### Disinfection Byproducts

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Units of Measure	Source of Contaminant
2011	Total Haloacetic Acids	8.48	<6.0	9.9	60	ppb	By-product of drinking water chlorination.
2011	Total Trihalomethanes	23.88	<4.0	31.0	80	ppb	By-product of drinking water chlorination.

### Lead and Copper

**Definitions: Action Level Goal (ALG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

**Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Sampled	Contaminant	The 90th Percentile	# of Sites over AL	Action Level	MCLG	Violation	Unit of Measure	Source of Contaminant
2010	Lead	0.0034	0	15		ppb		Erosion of natural deposits; Corrosion of household plumbing
2010	Copper	0.41	0	1.3		ppb		Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

**Recommended Additional Health Information for Lead**

"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. This water supply 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>."

**Total Coliform**

Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.

Year	Contaminant	Highest Monthly % of Positive Samples	MCL	Units of Measure	Source of Contaminant
2012	Total Coliform Bacteria	1	*	Presence	Naturally present in the environment

\* Presence of coliform bacteria in 5 % or more of the monthly samples.

**Fecal Coliform** REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA

**Violations NA**

**City Pflugerville Surface Water Regulated at the treatment plant 2012**

PARAMETER	MCL	MCLG	DATE	AVE RESULTS	HIGH	LOW
Fluride(ppm)	2	2	2011	0.34	0.34	0.34
Nitrate (as N (ppm)	10	10	2012	0.57	0.57	0.57
Turbidity (ntu)	0.3	n/a	2012	0.06	0.59	0.01

99.5 % of all reading below 0.3 NTU

**Turbidity**

Turbidity has no health effects. However ,turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

Year	Contaminant	Highest Single Measurement	Lowest Monthly % of Smmple meeting limits	Turbidity Limits	Units of Measure	Source of Contaminant
2012	Turbidity	0.59	99.5	7	0.3 NTU	Soil runoff

1 The TOC removal ratio is the percent of TOC removed through the treatment process divided by the percent of TOC required by TCEQ to be removed. TCEQ requirement is to have a running annual average equal to or greater than 1

**Total Organic Carbon Disinfection Byproducts Regulated at Treatment Plant**

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Units of Measure	Source of Contaminant
2011	Raw Water TOC	6.23	3.20	8.70	ppm	Naturally present in the environment.
2011	Finished Water TOC	4.19	2.90	6.00	ppm	Naturally present in the environment.
2011	Present Removal	30.66	3.60	61.70	% removal	NA
2011	Total Hardness	170	170	170	mg/L	Naturally occurring calcium and magnesium.

**Cryptosporidium Monitoring Information**

The City of Pflugerville started monitoring for cryptosporidium in June of 2008. We collect one sample per month and send it to a lab in Waco. All the samples have been negative. Cryptosporidium is a microbial parasite that may be commonly found in surface water. Cryptosporidium may come from animal and human feces in the watershed.The results of our monitoring indicated that there may be cryptosporidium in the rawwater and/or treated finished water.Although treatment by filtration removes cryptosporidium, it cannot guarantee 100 percent removal. The testing methods used cannot determine if the organisms are alive and capable of causing cryptosporidiosis, an abdominal infection with nausea, diarrhea and abdominal cramps that may occur after ingestion of contaminated water.

Cryptosporidium Monitoring Information		Oocysts	Cysts
2010	Cryptosporidium	0	N/A
2010	Giardia	N/A	0

Regulated in the Distribution System

PARAMETER	MCL	MCLG	DATE	AVG.Result	High	Low
Haloacetic Acids HAA5 (ppb)	60AVG	na	2011	8.48	9.9	<6.0
Total Trihalomethanes (ppb)	80 AVG	na	2011	23.88	31.0	<4.0

**Regulated Disinfectant**

PARAMETER	MRDL	MRDLG	DATE	AVG.Result	High	Low
Chloramines (ppm)	4	4	2011	1.47	3.6	0.5

Cryptosporidium Monitoring Information Oocysts Cysts



## Blue Water 130 Consumer Confidence Report Data 2012

Inorganic Contaminants								
Year or range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Units of Measure	Source of Contaminant Range
2012	Barium	0.130	0.130	0.130	2	2	ppm	Discharge of drilling wastes discharge; from metal refineries; erosion of natural deposits
2012	Fluoride	0.24	0.24	0.24	4	4	ppm	Erosion of natural deposits; water additive which promote strong teeth; discharge from fertilizer and aluminum factories
2012	Nitrate	0.04	0.04	0.04	10	10	ppm	Runoff from fertilizer use; Leaching from septic tanks; sewage; Erosion of natural deposits.

## Secondary and Other Constituents Not Regulated

(No associated adverse health effect)

Year or range	Contaminant	Average Level	Minimum Level	Maximum Level	Secondary	Units of Measure	Source of Contaminant Range
2012	Calcium	9.13	9.13	9.13	NA	ppm	Abundant naturally occurring
2012 water	Chloride	23	23	23	300	ppm	Abundant naturally occurring element; used in purification; by-product of oil field activity
2012	pH	8.1	8.1	8.1	7	units	Measure of corrosivity of water.
2012	Total Alkalinity as CaCO <sub>3</sub> .	200	200	200	NA	ppm	Naturally occurring soluble mineral salts.
2012	Total Hardness as CaCO <sub>3</sub>	36.2	36.2	36.2	NA	ppm	Naturally occurring calcium and magnesium
2012	Total Dissolved Solids	257	257	257	1000	ppm	Total dissolved mineral constituents in water.
2012	Magnesium	3.25	3.25	3.25	NA	ppm	Abundant naturally occurring element.
2012	Manganese	0.0125	0.0125	0.0125	0.05	ppm	Abundant naturally occurring element.
2012	Sodium	83.4	8.34	8.34	NA	ppm	Erosion of natural deposits; byproducts of oil field activity.

