Manville WSC Consumer Confidence Report Data 2011

Inorganic Contaminants

Collection Date	Contaminant	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Violation	Unit of Measure	Likely Source of Contamination
2011	Barium	0.137	.041-.137	2	2	N	ppm	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
2011	Fluoride	2.19	.27-2.19	4	4	N	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2011	Nitrate (measured as Nitrogen)	9.84	<.01-9.84	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

2005	Beta/photon emitters	5.2	0-5.2	0	4	N	mrem/yr	Decay of natural and man-made deposits.
2005	Gross alpha excluding radon and uranium	2.1	0-2.1	0	15	N	pCi/L	Erosion of natural deposits.
2011	Gross beta emitters	5.8	<4.0-5.80	0	50	0	pCi/L	Decay of natural and man-made deposits.
2011	Gross alpha	4.5	<2.0-4.5	0	15	0	pCi/L	Erosion of natural deposits.

Organic Contaminants TESTING WAIVED, NOT REPORTED, OR NONE DETECTED

Volatile Organic Contaminants

2011	Vinyl Chloride	<0.5	<0.5-<0.5	0	2	N	ppb	Leaching from PVC piping; Discharge from plastic factories.

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 point to distribution.

Year (Range)	Contaminant	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Violation	Unit of Measure	Likely Source of Contamination
2011	Chloroform	27	<.5-27.0			N	ppb	By-product of drinking water disinfection.
2011	Bromoform	16.5	<.5-16.5			N	ppb	By-product of drinking water disinfection.
2011	Bromodichloromethane	22.2	<.5-22.2			N	ppb	By-product of drinking water disinfection.
2011	Dibromochloromethane	22.5	<.5-22.5			N	ppb	By-product of drinking water disinfection.

City of Pflugerville Consumer Confidence Report Data 2011

Inorganic Contaminants

Collection Date	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2011	Arsenic	0.002	0.002	0.002	10	0	ppb	Erosion of natural deposits; runoff from orchards; runoff 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	0.43	4	4	ppm	Erosion of natural deposits water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2011	Nitrate	0.97	0.01	2.07	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2011	Combined Radium 226 & 228	<1.0	<1.0	<1.0	5	0	pCi/L	Erosion of natural deposits
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

Organic Contaminants

2011	Atrazine	0.10	0.10	0.10	3	3	ppb	Runoff from herbicide used on row crops.

Maximum Residual Disinfectant Level

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MCL	MRDLG	Unit of Measure	Source of Disinfectant
2011	Chloramine Residual	1.47	0.5	3.6	4	4	ppm	Disinfectant used to control microbes

Disinfection Byproducts

Collection Date	Disinfectants and Disinfection By-Products	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source of Contaminant
2011	Total Haloacetic acids (HAA5)*	8.48	<6.0	9.9	60	ppb	By product of drinking water disinfection
2011	Total Trihalomethanes (TThm)*	23.88	<4.0	31.0	80	ppb	By product of drinking water disinfection

Unregulated Initial Distribution System Evaluation for Disinfection Byproducts

This evaluation is sampling required by EPA to determine the range of total trihalomethane and haloacetic acid in the systems for future regulations. The samples are not used for compliance, and may have been collected under non-standard conditions. EPA also requires the data to be reported here.

Unregulated Contaminants

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

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	Units of Measure	Source of Contamination
2011	Chlorofonn	3.0	<1.0	3.9	ppb	Byproduct of drinking water disinfection
2011	Bromofonn	6.8	<1.0	8.9	ppb	Byproduct of drinking water disinfection
2011	Bromodichloromethane	4.7	<1.0	6.4	ppb	Byproduct of drinking water disinfection
2011	Dibromochloromethane	8.5	<1.0	11.5	ppb	Byproduct of drinking water disinfection

Lead and Copper

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

continued City of Pflugerville

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	MCL	Units of Measure	Source of Contaminant
2011	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

Violation Type	Health Effect	Duration	Explanation	Steps to Correct
NA				

City of Pflugerville Surface Water Regulated at the Treatment Plant 2011

PARAMETER	MCL	MCLG	DATE	AVG Result	High	Low
Fluride(ppm)	2	2	2011	0.34	0.34	0.34
Nitrate (as N) (ppm)	10	10	2011	0.17	0.17	0.17
Turbidity (ntu)	0.3	n/a	2011	0.23	0.6	0.13
98% of all reading below 0.3 NTU						

Only one set of samples collected during 2007

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. Theses organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

Year	Contaminant	Hightest Single Measurement	Lowest Monthly % of Samples meeting limits	Turbidity Limits	Units of Measure	Source of Contaminant
2011	Turbidity	0.60	99.5	0.3	NTU	Soil runoff

Total Organic Carbon

Total organic carbon (TOC) no health effects. The disinfectant can combine with TOC to form disinfection byproducts. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. Byproducts of disinfection include trihalomethanes(THMs) and haloacetic acids(HAA) which are reported elsewhere in this report.

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 raw water 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			Ocysts	Cysts						
2010	Cryptosporidium		0	N/A						
2010	Giardia		N/A	0						

Disinfection Byproducts Rule Regulated at the Treatment Plant

PARAMETER	MCL	MCLG	DATE	AVG. Result	High	Low
Raw Water TOC ppm	none	none	2011	6.23	8.70	3.20
Tap Water TOC ppm	none	none	2011	4.19	6.00	2.90
TOC Removal Ratio (%)	AVG > = 1	none	2011	30.66	61.70	3.60

Regulated in the Distribution System

PARAMETER	MCL	MCLG	DATE	AVG. Result	High	Low
Haloacetic Acids HAA5 (ppb)	60 AVG	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

Proposed Standards

PARAMETER	MCL	MCLG	DATE	AVG. Result	High	Low
Bromodichloromethane ppb	not regulated	0	2011	4.76	6.4	<1.0
Bromoform ppb	not regulated	0	2011	6.80	8.9	<1.0
Dibromochloromethane ppb	not regulated	60	2011	8.52	11.5	<1.0
Chloroform ppb	not regulated	0	2011	3.00	3.9	<1.0

City of Austin 2011 Consumer Report

There were no drinking water treatment violations in 2010.

The Utility is in compliance with the Total Organic Carbon (TOC) removal requirements in the Disinfection Byproducts Rule.

All surface water sources are known to be susceptible to contamination by *Cryptosporidium*. Because of this, the Utility monitors for *Cryptosporidium* in the drinking water and the lake water, which is the source of water to the two water treatment plants. The Utility has conducted increased monitoring for *Cryptosporidium* in advance of recently published regulations. During the 2011 monitoring, *Cryptosporidium* was not found. The water plants treat drinking water with a filtration process that has been shown to remove *Cryptosporidium*.

KEY

TT = Treatment Technique
MCL = Maximum Contaminant Level
MCLG = Maximum Contaminant Level Goal

ppm = parts per million or milligrams per liter
ppb = parts per billion or micrograms per liter
ntu = nephelometric turbidity units (a measure of turbidity)

Regulated at the Treatment Plant

PARAMETER	MCL	MCLG	DATE	AVE Result	High	Low
Barium (ppm)	2	2	2011	0.01	0.01	0.01
Fluoride (ppm)	4	4	2011	0.49	0.54	0.43
Nitrate (as N) (ppm)	10	10	2011	0.09	0.10	0.08
Turbity (ntu)	TT	n/a	2011	0.05	0.16	0.02
100% of the readings were below .3 ntu						

Disinfection Byproducts Rule Regulated at the Treatment Plant

PARAMETER	MCL	MCLG	DATE	AVE Result	High	Low
Raw Water Total Organic Carbon (ppm)	none	none	2011	3.5	4.74	2.95
Tap Water Total Organic Carbon (ppm)	none	none	2011	2.46	2.84	1.98
TOC Removal Ratio (%)1	AVG >=1	none	2011	1.97	3.02	1.05

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.

Unregulated Contaminant Monitoring Regulations Reporting (UCMR)

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. Any unregulated contaminants detected are reported in the following table. For additional information and data visit http://www.epa.gov/safewater/ucmr/ucmr2/index.html, or call the Safe Drinking Water Hotline at (800) 426-4791.

PARAMETER	MCL	MCLG	DATE	AVE Result	High	Low
N-Nitrosodimethylamine (ppb)	none	none	2010	0.0021	0.0022	<0.0021
Bromodichloromethane (ppb)	none	none	2011	9.5	14.5	8.0
Chlorodibromomethane (ppd)	none	none	2011	6	11.0	5.3
Chloroform (ppd)	none	none	2011	11.7	15.4	8.1