

Piedmont Municipal Authority 2010 Water Quality Report

We are pleased to provide you with the 2010 Annual Drinking Water Quality Report. As always, we want to keep our citizens informed about the excellent water and services we have delivered to you over the past year. Our goal is and always has been, to provide you a safe and dependable supply of drinking water. Our source of water is ground water and purchased water. Our ground water comes from 3 wells located near 234th and Pennsylvania Avenue in Oklahoma City (SE/4 Sec. 3,T14N,R3W). Our wells are approximately 400 to 450 feet in depth, and produced from the Garber-Wellington Aquifer. Also, we receive water from the City of Oklahoma City through the Lake Hefner Water Treatment Plant.

Our distribution system includes over one hundred thirty miles of piping that serves about 100 square miles in a service area which includes parts of northern Canadian and southern Kingfisher counties. We serve over 2,000 residential, commercial, industrial, and agricultural taps through four water storage facilities. We strive to maintain excellent service to all members across the system.

Contacting Your City

If you have any questions about this report or concerns about your water utility, please contact Piedmont Municipal Authority (PMA) at (405) 373-2000 or by writing us at P.O. Box 240, Piedmont, OK 73078. We want our valued customers to be informed about their water utility. If you want more information, we encourage you to attend any of our regularly scheduled meetings. The Piedmont Municipal Authority Board of Trustees meetings are held the fourth Monday of every month at 7:00 p.m. at the George Fina Municipal Building, 314 Edmond Road NW in Piedmont.

Contaminants Information

The PMA routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1, 2010 to December 31, 2010. All drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

There are seventy-six regulated contaminants for which community water systems are required to test, these include microbiological, radioactive, and inorganic, synthetic organic, including pesticides and herbicides, and volatile organic contaminants. We are exempt from testing for synthetic organic contaminants based upon a vulnerability assessment conducted by the Oklahoma Department of Environmental Quality (O.D.E.Q.). The last table show only the contaminants that were detected.

We consistently monitor for various contaminants in the water supply in order to meet all regulatory requirements. Our system has had no health contaminants which have exceeded allowable levels. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water hotline at 800-426-4791.

Water Sources

The sources of drinking water (both tap 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 we treat include:

- **Microbial contaminants**: viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**: 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**: may come from a variety of sources such as agriculture and residential uses.
- **Radioactive Contaminants**: naturally occurring.
- **Organic Chemical Contaminants**: 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.

Understanding the Test Results

In the table on the back you will find any terms and abbreviations with which you might not be familiar. To help you better understand these terms, we've provided the following definitions:

- **Parts per million (ppm)** or Milligrams per liter (mg/l)
- **Parts per billion (ppb)** or Micrograms per liter (ug/l)
- **Picocuries per liter (pCi/L)** Picocuries per liter is a measure of the radioactivity in water.
- **Action Level (AL)** the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- **Maximum Contaminant Level (MCL)** the MCL is 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)** is 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.

Vulnerability and Risks

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer who are 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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791.)

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. We 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 models, 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>.

Other Water Sources

With the completion of the transmission line from OKC, we now obtain water from Lake Hefner in OKC. Therefore, we have also attached the City of Oklahoma City's Drinking Water Report for 2010.

Violations

In November of 2009, the Piedmont Municipal Authority was in violation according to DEQ. Radionuclide Concentrations above the allowable limits were found in Well No. 1 and 2. The Piedmont Municipal Authority discontinued use of these wells and pumps were removed. As of January 2010 the Piedmont Municipal Authority was no longer considered in violation by DEQ.

Thank you for allowing us to continue to provide your family with clean, quality water this year. In order to maintain safe and dependable water supply, we sometimes need to make improvements that benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for your understanding.

Annual Drinking Water Quality Report

PIEDMONT

OK2000909

Annual Drinking Water Quality Report for the period of January 1 to December 31, 2010.

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

The source of drinking water used by PIEDMONT is Purchased Surface Water.

For More Information Regarding this report please contact:

Name: Clark Williams, City Manager
Phone: 405-373-2621

Clark M. Williams

Source Water Information

<u>Source Water Name</u>	<u>Type of Water</u>	<u>Report Status</u>	<u>Location</u>
OKC Hefner	SW	Low	Lake Hefner
Well 3	GW	Low	Garber-Wellington
Well 4	GW	Low	Garber-Wellington
Well 5	GW	Low	Garber-Wellington

2009 Regulated Contaminants Detected

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. ALG's 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.

Lead & Copper	Date Sampled	MCLG	Action Level (AL)	90 th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	07/26/2011	1.3	1.3	0.171	0	ppm	N	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems.

Water Quality Test Results:

Maximum Contaminant Level Goal or MCLG: The level of a contaminant in drinking water below which there is known or expected risk to health. MCLGs allow for a margin of safety.

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

Maximum residual disinfectant level goal or MRDLG: The level of a 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 contaminants.

Definitions:

ppb: micrograms per liter or parts per billion- or one ounce is 7,350,000 gallons of water

na: not applicable

Avg: Regulatory compliance with some MCLs are based on running annual average monthly samples

ppm: milligrams per liter or parts per million – or one ounce in 7,350 gallons of water.

Regulated Contaminants

Disinfectants and Disinfection by Products	Collection Date	Highest Level	Range of Level Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)*		7	7-7	No goal for the total	60	ppb	N	By product of drinking water chlorination
Total Trihalomethanes (TTHm)*		12	12.3-12.3	No goal for the total	80	ppb	N	By product of drinking water chlorination

* Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

Inorganic Contaminants	Collection Date	Highest Level	Range of Level Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic – while your drinking water meets EPA standards for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems	3/15/2010	3.2	3.5-9.5	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production of waste.
Barium	10/08/2007	0.215	0.132 – 0.215	2	2	ppm	N	Discharge of drilling waste, Discharge from metal refineries, erosion of natural deposits.
Chromium	10/08/2007	32.6	14.1-32.6	100	100	ppb	N	Discharge from steel and pulp mills, erosion of natural deposits,
Fluoride	10/08/2007	0.49	0-0.49	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.

Nitrate (measured as Nitrogen)	4/22/2011	2	0.59-0.82	10	10	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Selenium	10/08/2007	17.3	0-17.3	50	50	ppb	N	Discharge from petroleum refineries, erosion of natural deposits; discharge from mines,

Radioactive Contaminants	Collection Date	Highest Level	Range of Level Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	6/11/10	0.451	0.066-0.451	0	5	pCi/L	N	Erosion of natural deposits
Gross alpha excluding radon and uranium	5/28/10	14.6	3.710-14.60	0	15	pCi/L	N	Erosion of natural deposits.
Uranium	5/27/10	15.7	15.9-70.7	0	30	Ug/l	Y	Erosion of natural deposits. 1. January 2010 Well # 1 & 2 inactive.

Violations Table

Lead and Copper Rule

- 1/6/10 Tested 40 sites
- 7/29/11 Tested 20 sites

The lead and copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion on lead and copper containing plumbing materials.

Violation Type	Violation Begins	Violation End	Violation Explanation
Follow up or Routine tap M/R (LCR)	01/06/2010		40 sites were tested per DEQ/Violation end date N/A from DEQ. November 2010 DEQ reported that retakes for positive coliform had been submitted. Retakes were submitted and tested. Test results were absent of coliform organisms. DEQ did not receive retakes on proper retake form. 1/6/2010 40 sites were tested per DEQ/Violation end date N/A from DEQ.

Uranium

Some people who drink water containing uranium in excess of the MCL (30 ug/L) over many years may have increased risk of getting cancer and kidney toxicity.

Violation Type	Violation Begins	Violation End	Violation Explanation
MCL, Average	01/01/2009	03/31/2009	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, Average	04/01/2009	06/30/2009	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, Average	07/01/2009	09/30/2009	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
MCL, Average	10/01/2009	12/31/2009	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.

