

# 2015 Annual Water Quality Report

Monterey  
PWS ID: 2710004



## A Message from California American Water President Rob MacLean

Dear Customer:

The attached water quality report is our “report card” that gives you the results of the quality of the water we provided to your business or home in 2015. Since 2015 was the 4th year of the worst drought to hit California in 100 years, I want to thank you for your water conservation efforts throughout last year. The drought is a good reminder of how precious water is, and how much we can do to reduce our use when needed.

This report includes information about the quality of the water we provide to our customers. As you read through our Annual Water Quality Report, you will see that we continue to supply water that meets or surpasses all state and federal water quality standards. Better yet, the price you pay for this high quality water service remains about one penny per gallon.

Due to recent events in Flint, Michigan, I want to draw your attention to the sections of this report related to lead that demonstrate our compliance with the lead standard and provide helpful information for customers wishing to learn more about this topic. You can find more information on our [lead fact sheet](#), or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead)

Water is still an exceptional value when you consider the facilities and technology needed to draw water from the source and treat it, along with miles and miles of pipeline hidden below the ground to bring water to your tap. What’s more, our plant operators, water quality experts, engineers and maintenance crews work around the clock to make sure that quality water is always there when you need it. Delivering reliable, high-quality water service also requires significant investment to maintain and upgrade aging facilities. In 2015 alone, we invested more than more than \$64 million in local infrastructure across California.

Because water is essential for public health, fire protection, economic development and overall quality of life, California American Water’s employees are committed to ensuring that quality water keeps flowing not only today but well into the future.

Sincerely,

Robert G. MacLean  
President

This report contains important information about your drinking water. Translate it, or speak with someone who understands it at (888) 237-1333.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien al (888) 237-1333.

Ntawm no yog ib co lus qhia tseem ceeb heev txog koj cov dej seb huv npaum li cas. Yog tias koj xav tau kev pab txhais cov lus qhia no, thov hu rau peb ntawm (888) 237-1333.

這是關於您的水質的十分重要的資訊。如果您需要幫助翻譯此資訊請致電(888) 237-1333 與我們聯繫。

आपके पानी की गुणवत्ता के बारे में यह बहुत महत्वपूर्ण सूचना है। यदि इस सूचना के अनुवाद के लिए आपको सहायता की जरूरत हो, तो कृपया (888) 237-1333 पर हमें काल करें।

Это очень важная информация о качестве Вашей воды. Если Вам требуется перевод этой информации, позвоните нам по телефону (888) 237-1333.

Ito ay isang napakahalagang impormasyon tungkol sa kalidad ng iyong tubig. Kung iyong kailangan ng tulong sa pagsalin ng impormasyon na ito, mangyaring tumawag sa amin sa (888) 237-1333.

Đây là thông tin rất quan trọng về chất lượng nước của quý vị. Nếu quý vị cần thông dịch thông tin này, xin gọi chúng tôi theo số (888) 237-1333.

## Our Commitment to Quality

Last year, as in years past, your tap water met U.S. Environmental Protection Agency (EPA) and state drinking water health standards. California American Water vigilantly safeguards its water supplies, and once again we are proud to report that our system has not violated a maximum contaminant level.

## About California American Water

California American Water, a subsidiary of American Water (NYSE: AWK), provides high-quality and reliable water and/or wastewater services to more than 615,000 people.

## About American Water

American Water is the largest and most geographically diverse publicly traded U.S. water and wastewater utility company. Marking its 130th anniversary this year, the company employs 6,700 dedicated professionals who provide regulated and market-based drinking water, wastewater and other related services to an estimated 15 million people in 47 states and Ontario, Canada. More information can be found by visiting [www.amwater.com](http://www.amwater.com).

### What is a Consumer Confidence Report (CCR)?

To comply with State and U.S. Environmental Protection Agency (EPA) regulations, California American Water issues a report annually describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect your drinking water sources. In 2015, we conducted thousands of tests at numerous sampling points in your water system, all of which were below Federal and State maximum allowable levels. It includes details about where your water comes from and what it contains. The data presented in this report is a combination of data from our local water quality laboratory, our nationally recognized water quality lab, and commercial laboratories, all of which are certified in drinking water testing by the State Water Resources Control Board.

For more information about this report, or for any questions relating to your drinking water, please contact California American Water's Customer Service Center at (888) 237-1333.

### Share This Report

Landlords, businesses, schools, hospitals, and other groups are encouraged to share this important water quality information with water users at their location who are not billed customers of California American Water and therefore do not receive this report directly.

### About Your Water

Monterey is served by groundwater sources from the Santa Margarita, Paso Robles, and Carmel Alluvium aquifers as well as surface water from the Sand City Desalination Plant.

Drinking water treatment technologies used are reverse osmosis, iron and manganese removal, hydrogen sulfide removal, corrosion control, and disinfection to ensure the bacteriological quality.

The water supply is distributed for residential and commercial use in the communities of Carmel-By-the-Sea, Carmel Highlands, Carmel Valley, Del Rey Oaks, Monterey, Pacific Grove, Pebble Beach, Sand City, and Seaside.

### Notice of Source Water Assessment

An assessment of the drinking water sources for the California American Water's Monterey water system was completed in February 2003. This assessment is an evaluation of drinking water sources to determine the "possible contaminating activities" (PCAs) to which a source is most vulnerable. PCAs are current or historic human activities that are actual or potential origins of contamination for a drinking water source. PCAs include activities that use, store, produce or dispose of chemicals that have the potential to contaminate drinking water supplies.



The Monterey system's water sources are considered vulnerable to the following activities: airport maintenance and fueling areas, automobile gas stations, dry cleaners, high density housing, military installations, NPDES/WDR permitted discharges, parks, storm drain discharge permits, low and high density septic systems, and water supply wells.

Tetrachloroethylene and methyl tert-butyl ether, associated with industrial activities, have historically been detected in two groundwater sources. These sources are now tested on an increased frequency to monitor these contaminants

A copy of the completed assessment may be viewed at California American Water, 511 Forest Lodge Road, Suite 100, Pacific Grove, CA. You may request a summary of the assessment be sent to you by contacting Nina Miller, Water Quality & Environmental Compliance Manager, (831) 646-3269.

The Monterey water system completed a "Watershed Sanitary Survey" covering the period of 2001-2006. This survey examines the potential impacts of the Carmel River watershed.

### 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. California American 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 [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## Radon

Radon is a radioactive gas that you can't see, taste, or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes, and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will in most cases be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, test the air in your home. Testing is inexpensive and easy. Fix your home if the level of radon in your air is 4 picocuries per liter of air (pCi/L) or higher. There are simple ways to fix a radon problem that aren't too costly. For additional information, call your State radon program at (800) 745-7236, the EPA Safe Drinking Water Act Hotline at (800) 426-4791, or the National Safe Council Radon Hotline at (800) SOS-RADON.

## How to Contact Us

If you have any questions about this report, your drinking water, or service, please call California American Water Customer Service toll free: (888) 237-1333.



## Water Information Sources

**California American Water**  
[www.californiaamwater.com](http://www.californiaamwater.com)

**State Water Resources Control Board**  
[www.swrcb.ca.gov](http://www.swrcb.ca.gov)

**United States Environmental Protection Agency (USEPA)**  
[www.epa.gov/safewater](http://www.epa.gov/safewater)

**Safe Drinking Water Hotline**  
(800) 426-4791

**Centers for Disease Control and Prevention**  
[www.cdc.gov](http://www.cdc.gov)

**American Water Works Association**  
[www.awwa.org](http://www.awwa.org)

**Water Quality Association**  
[www.wqa.org](http://www.wqa.org)

**National Library of Medicine/National Institute of Health**  
[www.nlm.nih.gov/medlineplus/drinkingwater.html](http://www.nlm.nih.gov/medlineplus/drinkingwater.html)

## What are the Sources of Contaminants?

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 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 may result from urban stormwater 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 stormwater runoff, and residential uses.

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

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

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

## Unregulated Contaminant Monitoring

The USEPA created the Unregulated Contaminants Monitoring Rule (UCMR) to assist them in determining the occurrence of unregulated contaminants in drinking water and whether new



regulations are warranted. The first Unregulated Contaminants Monitoring Rule (UCMR1) testing was completed in 2003 for a list of contaminants specified by the USEPA. Unregulated contaminants are those for which the USEPA has not established drinking water standards. The second testing cycle (UCMR2) was conducted between November 2008 and August 2009. The third cycle (UCMR3) began in January 2013 and is in various stages of implementation through December 2015. The results from the UCMR monitoring are reported directly to the USEPA and mostly not detected. The results of this monitoring are incorporated in the data tables in this report as appropriate. For more information, contact our Customer Service Center at (888) 237-1333.

### Educational Information – Special Health Information

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 USEPA's Safe Drinking Water Hotline at (800) 426-4791.

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. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791.

### Our Water Research Efforts

*Cryptosporidium* is a microbial pathogen found in the surface water throughout the United States. Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100% removal. Ingestion of *Cryptosporidium* may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. People with severely weakened immune systems have a risk of developing life-threatening illness. We encourage such individuals to consult their doctor regarding appropriate precautions to take to avoid infection. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water. Researchers with American Water have developed a new, more accurate test for *Cryptosporidium* in water. **Our testing has shown this organism consistently absent in our drinking water.**



For additional information regarding cryptosporidiosis and how it may affect those with weakened immune systems, please contact our Customer Service Center at (888) 237-1333 or speak to your health care provider.

### How to Read This Table

California American Water conducts extensive monitoring to ensure that your water meets all water quality standards. The results of our monitoring are reported in the following tables. While most monitoring was conducted in 2015, certain substances are monitored less than once per year because the levels do not change frequently. For help with interpreting this table, see the “Table Definitions” section.

Starting with a **Substance**, read across. **Year Sampled** is usually in 2015 or a prior year. **MCL** shows the highest level of substance (contaminant) allowed. **MCLG** is the goal level for that substance (this may be 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** indicates government requirements were met. **Major Sources in Drinking Water** tells where the substance usually originates.

Unregulated substances are measured, but maximum allowed contaminant levels have not been established by the government.

### Definitions of Terms Used in This Report

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

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs (SMCL) are set to protect the odor, taste, and appearance of drinking water.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency.

**Maximum Residual Disinfectant Level (MRDL):** 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.

**Maximum Residual Disinfectant Level Goal (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.

**micromhos per centimeter ( $\mu\text{mhos/cm}$ ):** A measure of electrical conductance.

**NA:** Not applicable

**ND:** Not detected

**NS:** No standard

**Nephelometric Turbidity Units (NTU):** Measurement of the clarity, or turbidity, of the water.

**parts per billion (ppb):** One part substance per billion parts water, or micrograms per liter.

**parts per million (ppm):** One part substance per million parts water, or milligrams per liter.

**pH:** A measurement of acidity, 7.0 being neutral.

**picocuries per liter (pCi/L):** Measurement of the natural rate of disintegration of radioactive contaminants in water (also beta particles).

**Primary Drinking Water Standard (PDWS):** MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**Public Health Goal (PHG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California EPA.

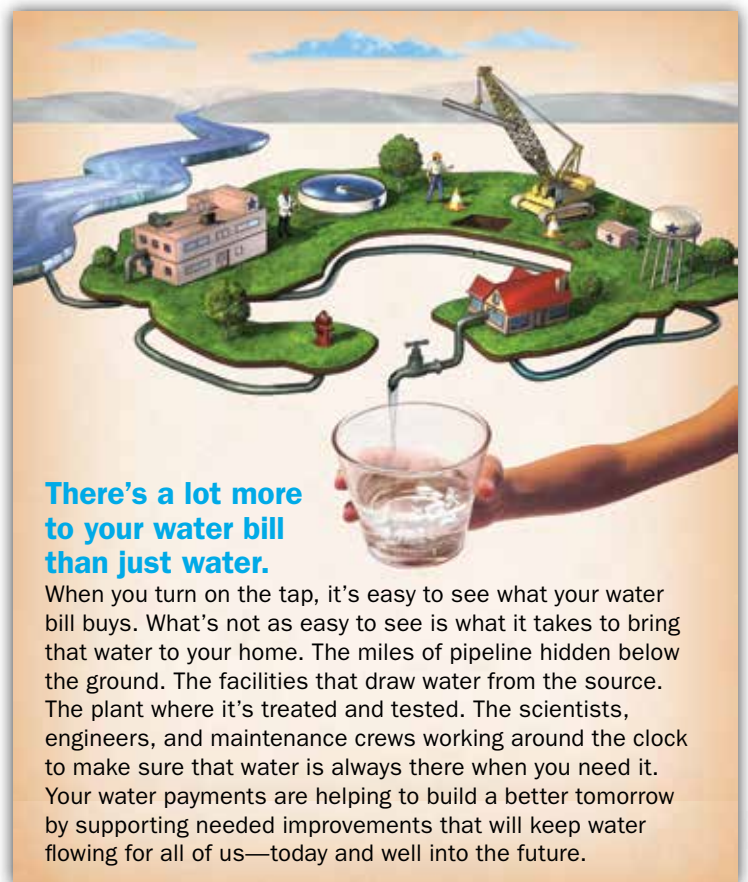
**Regulatory Action Level (RAL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

**RAA:** Running Annual Average

**TON:** Threshold Odor Number

**Total Dissolved Solids (TDS):** An overall indicator of the amount of minerals in water.

**%:** Percent



## Water Quality Results: Monterey

### Regulated Substances (Measured on the Water Leaving the Treatment Facility)

Substance (units)	Year Sampled	MCL	PHG (MCLG)	Average Amount Detected	Range of Detections		Compliance Achieved	Typical Source
					Low	High		
Gross Alpha Particle Activity (pCi/L)	2012 - 2015	15	0	1.10	ND	5.88	Yes	Erosion of natural deposits
Chromium VI (Hexavalent Chromium) (ppb)	2014	10	0.02	0.1	ND	1.5	Yes	Erosion of natural deposits
Combined Radium (pCi/L)	2013 - 2015	5	0	2.9	1.4	3.7	Yes	Erosion of natural deposits
Uranium (pCi/L)	2012 - 2015	20	0.43	0.3	ND	0.68	Yes	Erosion of natural deposits
Arsenic (ppb) <sup>1</sup>	2015	10	0.004	1.1	ND	3	Yes	Erosion of natural deposits
Mercury (ppb)	2013 - 2015	2	1.2	1.0	ND	1.1	Yes	Erosion of natural deposit
Fluoride (naturally occurring) (ppm) <sup>2</sup>	2014 - 2015	2.0	1	0.2	ND	0.34	Yes	Erosion of natural deposits
Nitrate as N (ppm) <sup>3</sup>	2015	10	10	0.95	ND	6.09	Yes	Runoff and leaching from fertilizer use; Leaching from septic tanks and sewage; Erosion of natural deposits
Selenium (ppb)	2014 - 2015	50	30	3	ND	12	Yes	Erosion of natural deposits

### Turbidity – A Measure of the Clarity of the Water (at the Sand City Desalination Facility)

Plant	Year Sampled	TT	PHG	Highest Single Measurement	Compliance Achieved	Typical Source
Turbidity (NTU) <sup>4</sup>	2015	1 NTU	NA	0.06	Yes	Soil runoff
		At least 95% of samples < 0.1 NTU		Lowest % of measurements < 0.1	Compliance Achieved	
				100%	Yes	

### Disinfection By-products, Disinfectant Residuals, and Disinfection By-products Precursors (Measured on the Water within the Distribution System)

Substance (units)	Year Sampled	MCL (MRDL)	MCLG (MRDLG)	Average Amount Detected	Range of Detections		Compliance Achieved	Typical Source
					Low	High		
Total Trihalomethanes (TTHM) (ppb)	2015	80	NA <sup>5</sup>	75	5.1	97.5	Yes	By-product of drinking water chlorination
Haloacetic Acids (ppb)	2015	60	NA <sup>5</sup>	34	1.1	38.7	Yes	By-product of drinking water chlorination
Chlorine (ppm)	2015	(4.0) (as Cl <sub>2</sub> )	(4.0) (as Cl <sub>2</sub> )	1.13	ND	2.18	Yes	Drinking water disinfectant added for treatment

### Tap Water Samples: Lead and Copper Results (Measured on Water in the Distribution System)

Substance (units)	Year Sampled	Action Level	PHG	Number of Samples	90 <sup>th</sup> Percentile	Number of Samples Above Action Level	Compliance Achieved	Typical Source
Copper (ppm)	2015	1.3	0.3	32	0.47	0	Yes	Internal corrosion of household plumbing system; Erosion of natural deposits
Lead (ppb)	2015	15	2	32	3	0	Yes	Internal corrosion of household water plumbing system; Erosion of natural deposits

### Secondary Substances (Measured on the Water Leaving the Treatment Facility and Ground Water Sources)

Substance (units)	Year Sampled	SMCL	Average Amount Detected	Range of Detections		Compliance Achieved	Typical Source
				Low	High		
Chloride (ppm)	2014 - 2015	500	63	15	196	Yes	Leaching from natural deposits; Seawater influence
Color (Units)	2015	15	0.2	ND	8	Yes	Naturally-occurring organic materials
Iron (ppb)	2015	300	17.1	ND	260	Yes	Leaching from natural deposits
Odor (Units)	2015	3	0.7	ND	3	Yes	Naturally-occurring organic materials
Specific Conductance (µmhos/cm)	2015	1,600	682	481	1429	Yes	Substances that form ions when in water; Seawater influence
Sulfate (ppm)	2014 - 2015	500	72	ND	157	Yes	Leaching from natural deposits
Total Dissolved Solids (ppm)	2014 - 2015	1000	272	84	670	Yes	Leaching from natural deposits
Turbidity (units)	2015	5	0.03	ND	1.3	Yes	Soil runoff
Zinc (ppm)	2014 - 2015	5	45.8	ND	229	Yes	Leaching from natural deposits; Treatment Process

### Additional Water Quality Parameters of Interest (Measured on the Water Leaving the Treatment Facility)

This table shows average levels of additional water quality parameters, which are often of interest to consumers. Values shown here are averages of operating data through 2015. Values may vary from day to day. There are no health-based limits for these substances in drinking water.

Substance (units)	Year Sampled	Average Amount Detected	Range of Detections	
			Low	High
Boron (ppm)	2015	915	828	1081
Alkalinity as CaCO <sub>3</sub> (ppm)	2015	139	63	199
Calcium (ppm)	2015	45	24	69
Magnesium (ppm)	2015	13	3	20
pH (pH Units)	2015	7.48	6.79	7.88
Radon (pCi/L)	2010	322	163	638
Sodium (ppm)	2014 - 2015	70	48	99
Total Hardness as CaCO <sub>3</sub> (ppm)	2015	167	71	254

### Unregulated Substances (Measured on the Water Leaving the Treatment Facility or within the Distribution System)

Substance (units)	Year Sampled	Average Amount Detected	Range of Detections	
			Low	High
Bromochloromethane (ppb)	2013 - 2015	0.14	0.08	0.19
Chlorate (ppb)	2013 - 2015	189	26	490
Molybdenum	2013 - 2015	6	2.2	14.4
Strontium (ppb)	2013 - 2015	284	90.8	397.7
Vanadium (ppb)	2013 - 2015	1.41	0.3	5.6

<sup>1</sup> Arsenic - While your drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency 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.

<sup>2</sup> Fluoride- Clifornia American Water does not add fluoride to the water in the Monterey Peninsula area. Fluoride occurs naturally in the groundwater we serve.

<sup>3</sup> Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

<sup>4</sup> Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

<sup>5</sup> TTHM/HAA5- Although there is no collective MCLG for this contaminant group, there are individual MCLGs for some of the individual contaminants. Trihalomethanes: bromodichloromethane (zero); bromoform (zero); chloroform (0.07mg/L); dibromochloromethane (0.06 mg/L). Haloacetic Acids: Dichloroacetic Acid (zero); Trichloroacetic Acid (0.02mg/L). Monochloroacetic Acid (0.07mg/L), Bromoacetic Acid and Dibromoacetic Acid are regulated with this group but have no MCLGs.

Additional Monitoring- In addition to the parameters in this table, other parameters were monitored for, including regulated pesticides, herbicides, petroleum by-products and metals. None of those parameters were detected in the water. If you have any questions about this report or your drinking water, please call Customer Service at 1-888-237-1333.