**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water.  There is no known or expected risk to health from exposure to MCLs.  Violation of MCLs may result in treatment requirements that a water system must follow.

**Maximum Contaminant Level Goal (MCLG):** The level of a drinking water contaminant below which there is no known or expected risk to health. MCLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.  MCLGs allow for a margin of safety.

**Action Level (AL):** The concentration of a contaminant, which if exceeded, triggers treatment or other requirements that a water system must follow.  Treatment techniques (TT) and public notices are required to reduce the level of a contaminant in drinking water when it exceeds the AL.

**Detection System Detections 2010:**

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Units</th>
<th>Maximum Contaminant Level</th>
<th>MCLG</th>
<th>Results</th>
<th>Violation</th>
<th>Sources in Drinking water</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-nitrosodimethylamine (NDMA)</td>
<td>ppb</td>
<td>0.002</td>
<td>0.001</td>
<td>≤0.002 – 0.035</td>
<td>No</td>
<td>By-product of drinking water disinfection</td>
</tr>
</tbody>
</table>

**Notes:**
1. MCLs allow water systems to monitor once per year because the concentrations of these contaminants do not change frequently.  Some of the data, though representative, is more than one year old.  Tables contained in this brochure may summarize analytical test results conducted on Chandler’s drinking water in 2009 or 2010.  Some average values are less than the low range due to submittal of only certain samples, or due to the regulatory completeness calculations.

**Distribution System Detections 2010:**

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Units</th>
<th>Maximum Contaminant Level</th>
<th>MCLG</th>
<th>Results</th>
<th>Violation</th>
<th>Sources in Drinking water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Coliform Bacteria</td>
<td>Non detectable</td>
<td>No</td>
<td>No</td>
<td>Naturally present in the environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chlorine (Distribution System)</td>
<td>ppm</td>
<td>≤0.2</td>
<td>0.2 ppm</td>
<td>No</td>
<td>Water additive used to control microbes</td>
<td></td>
</tr>
<tr>
<td>Turbidity</td>
<td>NTU</td>
<td>≤0.5</td>
<td>0.5 NTU</td>
<td>No</td>
<td>Soil runoff</td>
<td></td>
</tr>
<tr>
<td>(TTHM) Total</td>
<td>ppb</td>
<td>≤40</td>
<td>40</td>
<td>No</td>
<td>By-product of drinking water disinfection</td>
<td></td>
</tr>
<tr>
<td>Haloacetic</td>
<td>ppb</td>
<td>≤80</td>
<td>80</td>
<td>No</td>
<td>By-product of drinking water disinfection</td>
<td></td>
</tr>
</tbody>
</table>

**Detected Unregulated Contaminant (UCMR2):**

<table>
<thead>
<tr>
<th>Contaminant</th>
<th>Units</th>
<th>MRL</th>
<th>Average (of samples)</th>
<th>Range (Low to high)</th>
<th>Sources in Drinking Water</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead (ppb)</td>
<td>Action level +15 ppb</td>
<td>0.002</td>
<td>0.001</td>
<td>≤0.002 – 0.035</td>
<td>No</td>
</tr>
</tbody>
</table>

**Notes:**
1. MCLs allow water systems to monitor once per year because the concentrations of these contaminants do not change frequently.  Some of the data, though representative, is more than one year old.  Tables contained in this brochure may summarize analytical test results conducted on Chandler’s drinking water in 2009 or 2010.  Some average values are less than the low range due to submittal of only certain samples, or due to the regulatory completeness calculations.

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<th>Violation</th>
<th>Sources in Drinking water</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-nitrosodimethylamine (NDMA)</td>
<td>ppb</td>
<td>0.002</td>
<td>0.001</td>
<td>≤0.002 – 0.035</td>
<td>No</td>
<td>By-product of drinking water disinfection</td>
</tr>
</tbody>
</table>

**Notes:**
1. MCLs allow water systems to monitor once per year because the concentrations of these contaminants do not change frequently.  Some of the data, though representative, is more than one year old.  Tables contained in this brochure may summarize analytical test results conducted on Chandler’s drinking water in 2009 or 2010.  Some average values are less than the low range due to submittal of only certain samples, or due to the regulatory completeness calculations.
The City of Chandler Municipal Utilities Department is committed to providing a safe supply of drinking water to our customers. As a result of this strong commitment, we are frequently performing monitoring on the water residents receive than is required by law. We issue this annual report describing the quality of your drinking water to comply with state and U.S. Environmental Protection Agency (EPA) regulations. Much of the language used is mandated by these regulations. The purpose of this report is to raise your understanding of drinking water awareness and the need to protect your drinking water. This report is intended to report that Chandler’s water meets, or exceeds, all health and safety standards set by the county, state, and federal government regulatory agencies for 2010. This brochure provides valuable information about your drinking water, including information about its source and quality.

**About your Water Supply**

The drinking water distributed by the City of Chandler to its customers comes from rivulets, tanks, or other sources. The **Surface Water Treatment Plant** treats and disinfests water from the Salt River, Verde River, the CAP (Colorado River), and Salt River Project (SRP) wells that transport water to Chandler through the Consolidated Canal. The **Bottled Water** source can be tap water and bottled water. In 2010 there was an average of 51.8 million gallons of bottled water consumed. The **City’s Current Water Supply** is made up of 89.8 billion gallons of water, or 16% of the City’s total drinking water.

**Chandler’s Surface Water Treatment Plant** produces 8.9 billion gallons of water, or about 25% of the City’s total drinking water. Groundwater wells produced 7 billion gallons, or 47% of the City’s total drinking water. The **San Tan Vista WTP** supplied 3 billion gallons, or 16% of the City’s total drinking water.

**Drinking Water and your Health**

Drinking water, including bottled water, may be reasonably expected to contain at least 50 different contaminants and other substances. Some contaminants do not exist in the drinking water 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 (EPA) Safe Drinking Water Hotline at 1-800-426-4791.

**Microbial contaminants**, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, livestock operations, and human or animal waste.

**Inorganic contaminants**, such as salts and metals, which can be naturally occurring or result from urban and domestic stormwater runoff, mining, and agricultural activities.

**Organic contaminants**, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and residential use.

**Radioactive contaminants**, which can be naturally occurring or result from the use of fertilizers and pesticides.

In order to ensure tap water is safe to drink, the EPA has promulgated regulations that limit the amount of certain contaminants in water provided by public water systems. The United States Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which may provide the same protection for public health. Information on these regulations may be obtained by calling the FDA at 1-888-463-6332.

Contaminants of concern for drinking water are subject to regulatory requirements for monitoring and analysis on a quarterly basis. Chandler sampled all of its water sources for applicable contaminants in 2009.

**Contaminants of concern**

**Unregulated Contaminant Monitoring Regulation** EPA published the final rule for the Second Unregulated Monitoring Regulation Cycle (UCMR2) on July 18, 2007. UCMR2 required a total of 25 compounds to be analyzed, with the assigned compliance period of 2009 through 2011.

**Cryptosporidium and Giardia** The City’s Surface Water Treatment Plant exceeds EPA requirements for removal of Cryptosporidium and Giardia in 2007. Though rare, Cryptosporidium and/or Giardia have been identified in the source water Chandler receives from the Consolidated Canal. The filtration systems in the City’s Surface Water Treatment Plant exceed EPA requirements for removal of Cryptosporidium and Giardia.

**Nitrate** Nitrate is a nutrient level measured in Chandler’s water during 2009 was 8.9 parts per million (ppm). The average was 3.8 ppm, which is well below the EPA limit of 10 ppm. Nitrate in drinking water at levels above 10 ppm is a concern at least because nitrate and nitrite levels have been shown to contribute to blue baby syndrome in infants. Nitrate levels may rise quickly for short periods of time due to rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider.

**Lead and Copper** Lead and copper tap sampling in the summer of 2010, with the concentrations of both normally less than 0.5 parts per billion. Lead and copper sampling will be in June-September 2013. 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. The City of Chandler is responsible for providing high quality drinking water, but cannot control the variation in lead levels that might occur at individual drinking water outlets. When your water spout is set foredd for serving, 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 whether your water supply may contain lead, you should 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 (1-800-426-4791) or at http://www.epa.gov/lead/leadinfo.

**Turbidity** Turbidity is the cloudiness of the water. Turbidity has no health effects, however, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity is monitored because it is a good indicator of the effectiveness of our filtration system.

**Synthetic Organic Chemicals (SOCs)** The Arizona Department of Environmental Quality (ADEQ) granted the City of Chandler monitoring waivers for SOC analysis on seven water production facilities and disinot at 25 water production facilities for the monitoring compliance period of 2009 through 2011.

**Total Trihalomethanes (TTM)** Some people who drink water that contains trihalomethanes in excess of the MCL over many years can experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.

**Protecting Chandler’s Water Supply**

**Backflow Prevention** The City of Chandler has a backflow prevention program that ensures proper installation and testing of devices throughout the City. These devices ensure hazards originating on customer’s property and from temporary connections do not impair the water in the system or pose a potential risk to water users. Return any water to the City’s water distribution system after the backflow device has been used for any purpose on the customer’s premises or within the customer’s piping system is unacceptable. Backflow prevention devices are required on any water service lines or connections to public water supplies. The City of Chandler has constructed backflow prevention systems to protect your water supply.

All surface water sources are considered high risk due to their exposure to open air. The overall risk posed to surface water is addressed by EPA through its increased monitoring requirements for surface water sources. Testing for contaminants is conducted high risk based on adjacent land use criteria. The Chandler public water system conducts regular monitoring of drinking water entering the water distribution system from all wells to ensure that land uses have not impacted the source water.

The complete report is available for inspection at ADEQ, 1110 W. Washington, Phoenix, Arizona 85007, between the hours of 8:00 a.m. and 5:00 p.m. Monday through Friday. For more information, visit ADEQ’s Surface Water Assessment and Protection Unit website at http://www.azdep.gov/environment/water/swlap.html.

**You and your Water Supply**

Your and your Water Supply

**Stormwater runoff from polluted areas finds its way into the storm drain system, which conveys the water to lakes, streams, river, retention basin, or canal.** Stormwater picks up debris, chemicals, and dirt, and other pollutants as it runs over driveways, lawns, sidewalks, and streets. It is important to know that stormwater is not treated prior to disposal into a treated water source. Therefore, it is required to restore a water supply to a usable drinking water source once it has become polluted. Pollution prevention requires a collective effort, save money, invest in our water system and keep the water supply safe. Let government representatives know that protective laws and adequate funding for research, inspection, and enforcement are important to you.

**Guidelines for Everyday Pollution Prevention – “Only Rain In The**

**Flavor**

The flavor of Chandler’s water may change at certain times of the year, depending on the source. For example, algae blooms in the summer during the spring months may cause the water to slightly flavor. You may also detect a change in the taste of the water when Chandler switches to well water as its primary source. Usually happens when SRP dies off its canal for routine maintenance. Chandler works with SRP to minimize algae in the canal system and to provide treatment at the Surface Water Treatment Plant to reduce off-flavors and odors. Also, a “Flavor Panel” meets weekly to monitor the taste and evaluate water samples for potential changes in the water. This panel is trained to recognize different flavors and odors. Many treatment plant changes made to enhance the quality of the water are based on recommendations from this panel.

**Who do I contact with questions about Chandler’s Drinking Water?**

If you have any questions about your tap water or the information in this report, please call 480-782-3660 during normal business hours (8:00 a.m. to 5:00 p.m., Monday through Friday). You can also visit our website at http://www.chandleraz.gov.

Citizens who wish to address the City Council about water issues may do so at any regular meeting of the City Council. The 2nd Tuesday of each month is set aside for residents to address the Council. The 4th Thursday of each month. The meetings are held at Chandler City Hall Council Chambers, 88 E. Chicago Street. For information about specific meetings, please contact the City’s office at 480-782-2180 or visit http://www.chandleraz.gov and click on Council Agenda in the Links section of the home page.