IS MY WATER SAFE?
We are pleased to present this year’s Annual Water Quality CCR (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). Last year, the water coming out of your tap met all U.S. Environmental Protection Agency (EPA) drinking water health standards. This report is intended to provide you with important information about your drinking water and the efforts made by the Acoma Water & Wastewater Department to provide safe drinking water. This report also provides a snapshot of last year’s water quality and is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by the U.S. EPA and the Acoma EPA. The Pueblo of Acoma Water & Wastewater Department wants to provide you with all the information you need so that we can work cooperatively to safeguard our water supplies.

WHERE DOES MY WATER COME FROM?
The Pueblo of Acoma drinking water supply is pumped from groundwater sources in the sandstone aquifers located in the Anzac area. In 2012 ground water wells supplied 156,000,000 gallons of drinking water. This water is treated with Chlorine disinfection and placed into the distribution system for potable
water use. Chlorine is added to the water to safeguard against harmful bacteria such as fecal coliform and e-coli.

**SOURCE WATER ASSESSMENT AND ITS AVAILABILITY.**

As mentioned, the Pueblo of Acoma drinking water supply is pumped from groundwater sources and treated with chlorination disinfection where it is then placed in the distribution system for the community’s potable water uses. The Pueblo of Acoma’s last Source Water Assessment was conducted by the U.S. EPA in 2009. The report determined that our wells have a low susceptibility for contamination based on well structure, hydrology, operation and maintenance, and contaminants that are feasible to reach drinking water sources. For more information on source water assessment or to view Acoma’s Source Water Protection Plan or the Acoma Water Quality Standards, please contact the Pueblo of Acoma Water & Wastewater Department located in the north modular building in the Utility Authority yard or call us at 505-552-5131.

**WHY ARE THERE CONTAMINANTS IN MY DRINKING WATER?**

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 U.S. Environmental Protection Agency’s (EPA) Safe Drinking Water Hotline (800-426-4791).

Pueblo of Acoma drinking water source comes from groundwater. 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, 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 stormwater runoff, industrial, domestic wastewater discharges, oil and gas production, mining, or farming. Pesticides
and herbicides 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 are by-products of industrial processes and petroleum production and can also come from gas stations, stormwater runoff, and septic systems.

*Radioactive contaminants* may be naturally occurring or the result of mining activities. In order to ensure that tap water is safe to drink, U.S. EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration (FDA) regulations provide similar protections for bottled water.

**DO I NEED TO TAKE SPECIAL PRECAUTION?**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as those with cancer undergoing chemotherapy, persons who have received organ transplants, those 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/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).

**ADDITIONAL INFORMATION FOR LEAD?**

It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. 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 using in home 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 you can contact the Acoma Water & Wastewater Department.

As outlined in the Safe Drinking Water Act, The Pueblo of Acoma samples for lead and copper throughout the community every three years. During the summer of 2011 we tested for lead and copper throughout our community water system and all samples collected were below the Action Level (AL) set forth by the U.S. EPA. In 2008, none of the samples collected exceeded the Action Level (AL). If you are concerned about elevated lead levels in your home’s water, you can flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from Safe Drinking Water Hotline (800-426-4791).
**HOW CAN I GET INVOLVED?**

You can help prevent groundwater pollution by taking some simple steps. Failing septic systems pose a contamination risk to the surface and ground water sources located throughout the community. Failing systems are generally caused by a clogged or damaged drainfield. The overwhelming majority of clogged septic systems are from grease and other meat and kitchen products that are washed down the drain. Once these items get into the drainfield, they cannot be removed and prevent the wastewater from filtering into the soil. The other situation we see is that the septic tank lids are missing or damaged allowing water and dirt to enter the system and causing the tank to be filled up with dirt. There is one situation where the entire septic tank has filled with dirt leaving the homeowner no other option but to replace the septic tank and drainfield.

The other way to get involved is by being an extra set of eyes and ears throughout the community. If you notice a water break, unusual water accumulation, or unusual activities near the water system facilities please call our office at 505-552-5131 during working hours or you can call the Acoma Public Safety Dispatcher at 505-552-6601/6602 after hours and weekends to report any issues. They will contact us and we will respond.

The Water & Wastewater Department is now located in the north modular building inside the Utility Authority yard. We invite you to come by and visit with us. We will be happy to discuss this Consumer Confidence Report with you and share more about what Acoma’s Water & Wastewater Department is all about.

**WHEN LOOKING AT THE WATER QUALITY DATA TABLE KEEP THE FOLLOWING IN MIND!**

**JUST HOW SMALL IS A PART PER MILLION (PPM) OR PART PER BILLION (PPB)?**

In one olympic size swimming pool there is 660,000 gallons (to give you a reference the Acoma pool is 100,000 gallons)

1PPM = 2 two-liter bottles in the olympic size pool!

1PPB = ½ teaspoon in the olympic size pool
2012 Pueblo of Acoma Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The U.S. EPA requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

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.

<table>
<thead>
<tr>
<th>Lead and Copper</th>
<th>Date Sampled</th>
<th>MCLG</th>
<th>Action Level (AL)</th>
<th>90th Percentile</th>
<th># Sites Over AL</th>
<th>Units</th>
<th>Violation</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>09/05/2011</td>
<td>1.3</td>
<td>1.3</td>
<td>0.0789</td>
<td>0</td>
<td>ppm</td>
<td>N</td>
<td>Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.</td>
</tr>
<tr>
<td>Lead</td>
<td>09/05/2011</td>
<td>0</td>
<td>15</td>
<td>2.1</td>
<td>0</td>
<td>ppb</td>
<td>N</td>
<td>Corrosion of household plumbing systems; Erosion of natural deposits.</td>
</tr>
</tbody>
</table>

Water Quality Test Results

Maximum Contaminant Level Goal or MCLG: 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.
Maximum Contaminant Level or 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 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.
Maximum residual disinfectant level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
Definitions:
ppb: micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water.
na: not applicable.
Avg: Regulatory compliance with some MCLs are based on running annual average of monthly samples.
ppm: milligrams per liter or parts per million - or one ounce in 7,350 gallons of water.
## Regulated Contaminants

<table>
<thead>
<tr>
<th>Disinfectants and Disinfection By-Products</th>
<th>Collection Date</th>
<th>Highest Level Detected</th>
<th>Range of Levels Detected</th>
<th>MCLG</th>
<th>MCL</th>
<th>Units</th>
<th>Violation</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine</td>
<td>2012</td>
<td>0.8</td>
<td>0.6 - 0.8</td>
<td>MRDLG - 4</td>
<td>MRDL - 4</td>
<td>ppm</td>
<td>N</td>
<td>Water additive used to control microbes.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inorganic Contaminants</th>
<th>Collection Date</th>
<th>Highest Level Detected</th>
<th>Range of Levels Detected</th>
<th>MCLG</th>
<th>MCL</th>
<th>Units</th>
<th>Violation</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barium</td>
<td>08/18/2010</td>
<td>0.029</td>
<td>0.029 - 0.029</td>
<td>2</td>
<td>2</td>
<td>ppm</td>
<td>N</td>
<td>Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.</td>
</tr>
<tr>
<td>Fluoride</td>
<td>08/18/2010</td>
<td>0.45</td>
<td>0.42 - 0.45</td>
<td>4</td>
<td>4.0</td>
<td>ppm</td>
<td>N</td>
<td>Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.</td>
</tr>
<tr>
<td>Nitrate [measured as Nitrogen]</td>
<td>2012</td>
<td>1</td>
<td>0 - 1.2</td>
<td>10</td>
<td>10</td>
<td>ppm</td>
<td>N</td>
<td>Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.</td>
</tr>
<tr>
<td>Selenium</td>
<td>08/18/2010</td>
<td>7.2</td>
<td>3.5 - 7.2</td>
<td>50</td>
<td>50</td>
<td>ppb</td>
<td>N</td>
<td>Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Radioactive Contaminants</th>
<th>Collection Date</th>
<th>Highest Level Detected</th>
<th>Range of Levels Detected</th>
<th>MCLG</th>
<th>MCL</th>
<th>Units</th>
<th>Violation</th>
<th>Likely Source of Contamination</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combined Radium 226/228</td>
<td>08/18/2010</td>
<td>2.8</td>
<td>1.4 - 2.8</td>
<td>0</td>
<td>5</td>
<td>pCi/L</td>
<td>N</td>
<td>Erosion of natural deposits.</td>
</tr>
<tr>
<td>Gross alpha excluding radon and uranium</td>
<td>08/18/2010</td>
<td>12</td>
<td>1 - 12</td>
<td>0</td>
<td>15</td>
<td>pCi/L</td>
<td>N</td>
<td>Erosion of natural deposits.</td>
</tr>
<tr>
<td>Uranium</td>
<td>08/18/2010</td>
<td>12</td>
<td>2.4 - 12</td>
<td>0</td>
<td>30</td>
<td>ug/l</td>
<td>N</td>
<td>Erosion of natural deposits.</td>
</tr>
</tbody>
</table>
Total Coliform

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.

<table>
<thead>
<tr>
<th>Violation Type</th>
<th>Violation Begin</th>
<th>Violation End</th>
<th>Violation Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>MONITORING (TCR), ROUTINE MAJOR</td>
<td>04/01/2012</td>
<td>04/30/2012</td>
<td>We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.</td>
</tr>
<tr>
<td>MONITORING (TCR), ROUTINE MAJOR</td>
<td>06/01/2012</td>
<td>06/30/2012</td>
<td>We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.</td>
</tr>
</tbody>
</table>

The Total Coliform monitoring violations listed above reflect testing during the month of April and June of 2012. During these months, 3 samples of the required 6 samples were collected and analyzed testing negative for total coliform. The Acoma Water & Wastewater Department has taken considerable steps to resolve this issue and we are committed to providing safe and reliable drinking water for the community. If you have any questions regarding these violations please contact us. Thank you.

For more information please contact:

Arvind Patel, Director
Acoma Water & Wastewater Department
27A Pinsbaari Dr.
P.O. Box 309
Acoma, NM 87034
Phone: 505-552-5131
Email: apatel@puebloofacoma.org

This table was created with assistance from the New Mexico Environmental Finance Center at New Mexico Tech.