

# **2013 Annual Water Quality Report**

Tonto Hills Domestic Water Improvement District

Public Water System ID No. AZ04 - 07076

Report Date

June 30, 2014

# CONSUMER CONFIDENCE REPORT

Report Covers Calendar Year: January 1 – December 31, 2013

Este informe contiene información muy importante sobre el agua usted bebe. Tradúscalo ó hable con alguien que lo entienda bien.

## I. Public Water System (PWS) Information

|   |   |          |              |        |                         |
|---|---|----------|--------------|--------|-------------------------|
| PWS Name:   | Tonto Hills Domestic Water Improvement District |          |              |        |                         |
| PWS ID Number:  | AZ04 - 07076                                    |          |              |        |                         |
| Licensed Operator Name:   | Robert Hanus                                    |          |              |        |                         |
| Telephone No.:  | 928-277-1543                                    | Fax No.: | 928-277-1106 | E-Mail | rhanus@azwastewater.com |
| We want our valued customers to be informed about their water quality. If you would like to learn more about public participation or to attend any of our regularly scheduled meetings, please refer to agendas and contact information posted regularly at <a href="http://www.tontohills.org">www.tontohills.org</a> and at the bulletin board at the community mailboxes for additional opportunities and meeting dates and times. You may also call 480-595-0128. |   |          |              |        |                         |

## II. Drinking 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 pickup substances resulting from the presence of animals or from human activity. |                    |
| Our water source(s):  | City of Scottsdale |

## III. Consecutive Connection Sources

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| A public water system that receives some or all of its finished water from one or more wholesale systems by means of a direct connection or through the distribution system of one or more consecutive systems. Systems that purchase water from another system report regulated contaminants detected from the source water supply in a separate table. <b>PWS ID Number AZ04 - 07098</b> provides a consecutive connection source of water (see <b>Section XI</b> for data table). |
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## IV. Drinking Water Contaminants

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| <p><u>Microbial contaminants</u>, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.</p> <p><u>Inorganic contaminants</u>, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.</p> <p><u>Pesticides and herbicides</u> that may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses.</p> <p><u>Organic chemical contaminants</u>, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban stormwater runoff, and septic systems.</p> <p><u>Radioactive contaminants</u>, that can be naturally occurring or be the result of oil and gas production and mining activities.</p> |
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## V. Vulnerable Population

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| 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. 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 of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by <i>Cryptosporidium</i> and microbiological contaminants, call the EPA <i>Safe Drinking Water Hotline</i> at 1-800-426-4791. |
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## VI. Source Water Assessment

If the public water system received a Source Water Assessment (SWA), a brief summary of the susceptibility as summarized in the SWA report should be included. Further source water assessment documentation can be obtained by contacting ADEQ at 602-771-4641.

## VII. Definitions

**AL = Action Level** - The concentration of a contaminant which, if exceeded, triggers treatment or other requirements.  
**MCL = Maximum Contaminant Level** - The highest level of a contaminant that is allowed in drinking water.  
**MCLG = Maximum Contaminant Level Goal** - The level of a contaminant in drinking water below which there is no known or expected risk to health.  
**MFL = Million fibers per liter.**  
**MRDL = Maximum Residual Disinfectant Level** - The level of disinfectant added for water treatment that may not be exceeded at the consumer's tap.  
**MRDLG = Maximum Residual Disinfectant Level Goal** - The level of disinfectant added for treatment at which no known or anticipated adverse effect on health of persons would occur.  
**MREM = Millirems per year** - A measure of radiation absorbed by the body.  
**N/A = Not Applicable** - Sampling was not completed by regulation or was not required.  
**NTU = Nephelometric Turbidity Units** - A measure of water clarity.  
**PCi/L = Picocuries per liter** - Picocuries per liter is a measure of the radioactivity in water.  
**PPM = Parts per million or Milligrams per liter (mg/L).**  
**PPB = Parts per billion or Micrograms per liter (µg/L).**  
**PPT = Parts per trillion or Nanograms per liter.**  
**PPQ = Parts per quadrillion or Picograms per liter.**  
**TT = Treatment Technique** - A required process intended to reduce the level of a contaminant in drinking water.

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| ppm x 1000 = ppb |
| ppb x 1000 = ppt |
| ppt x 1000 = ppq |

## VIII. Health Effects Language

**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 or agricultural activity. If you are caring for an infant, and detected nitrate levels are above 5 ppm, you should ask for advice from your health care provider.

If **arsenic** is less than or equal to the MCL, your drinking water meets EPA's standards. 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.

**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. Tonto Hills Domestic Water Improvement District 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 EPA *Safe Drinking Water Hotline* or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## IX. Water Quality Data

| Microbiological   | Violation Y or N | Number of Samples Present | Absent (A) or Present (P) | MCL | MCLG | Sample Month & Year | Likely Source of Contamination       |
|---|------------------|---------------------------|---------------------------|-----|------|---------------------|--------------------------------------|
| <b>Total Coliform Bacteria</b><br>(System takes ≥ 40 monthly samples) 5% of monthly samples are positive; (System takes ≤ 40 monthly samples) 1 positive monthly sample | N                | 0                         | A                         | 0   | 0    | Monthly             | Naturally present in the environment |
| <b>Fecal coliform and E. Coli (TC Rule)</b>   | N                | 0                         | A                         | 0   | 0    | Monthly             | Human and animal fecal waste         |

| Disinfectants                      | Violation Y or N | Running Annual Average (RAA)                                  | Range of All Samples (L-H) | MCL      | MCLG      | Sample Month & Year           | Likely Source of Contamination                                       |
|------------------------------------|------------------|---|----------------------------|----------|-----------|-------------------------------|--|
| Chlorine (ppm)                     | N                | 0.69 mg/L   | 0.15 - 2.11 mg/L           | MRDL = 4 | MRDLG = 4 | Monthly                       | Water additive used to control microbes                              |
| Disinfection By-Products           | Violation Y or N | Running Annual Average (RAA)                                  | Range of All Samples (L-H) | MCL      | MCLG      | Sample Month & Year           | Likely Source of Contamination                                       |
| Haloacetic Acids (ppb) (HAA5)      | N                | 21 µg/L   | 10 - 46 µg/L               | 60       | N/A       | 1/13, 3/13, 6/13, 9/13, 12/13 | Byproduct of drinking water disinfection                             |
| Total Trihalomethanes (ppb) (TTHM) | N                | 50 µg/L   | 33 - 72 µg/L               | 80       | N/A       | 1/13, 3/13, 6/13, 9/13, 12/13 | Byproduct of drinking water disinfection                             |
| Lead & Copper                      | Violation Y or N | 90 <sup>th</sup> Percentile AND Number of Samples Over the AL | Range of All Samples (L-H) | AL       | ALG       | Sample Month & Year           | Likely Source of Contamination                                       |
| Copper (ppm)                       | N                | 90 <sup>th</sup> Percentile =                                 | 0.02 - 0.26 mg/L           | AL = 1.3 | ALG = 1.3 | 8/2013                        | Corrosion of household plumbing systems; erosion of natural deposits |
| Lead (ppb)                         | N                | 90 <sup>th</sup> Percentile =                                 | <0.001 - 0.001 mg/L        | AL = 15  | 0         | 8/2013                        | Corrosion of household plumbing systems; erosion of natural deposits |

## X. Violations

| Type / Description | Compliance Period | Corrective Actions taken by PWS |
|--------------------|-------------------|---------------------------------|
| None               |                   |                                 |

An explanation of the violation(s) in the above table, the steps taken to resolve the violation(s), and any required health effects information are required to be included with this report. (Attach copy of Public Notice if available.)

## XI. Water Quality Data for City of Scottsdale Water Distribution System

Scottsdale provides a consecutive connection source of water for the Tonto Hills Domestic Water Improvement District. Data source is the City of Scottsdale Water Quality Report for calendar year 2013.

| Substance   | Unit | MCL         | MCLG      | Lowest Amount Detected            | Highest Amount Detected      | Average                 | Likely Source in Drinking Water          |
|---|------|-------------|-----------|-----------------------------------|------------------------------|-------------------------|--|
| <b>Total Coliform Bacteria</b><br>(System takes $\geq$ 40 monthly samples) 5% of monthly samples are positive; (System takes $\leq$ 40 monthly samples) 1 positive monthly sample | %    | 5 (monthly) | 0         | 0                                 | 0                            | 0                       | Naturally present in the environment     |
| Chlorine  | ppm  | MRDL = 4    | MRDLG = 4 | 0.2                               | 1.5                          | 0.94                    | Water additive used to control microbes  |
| Total Trihalomethanes (TTHM)  | ppb  | 80          | N/A       | 19                                | 71                           | 70                      | Byproduct of drinking water disinfection |
| Haloacetic Acids (HAA5)   | ppb  | 60          | N/A       | Not Detected                      | 17.9                         | 18                      | Byproduct of drinking water disinfection |
| Substance   | Unit | AL          | MCLG      | 90 <sup>th</sup> Percentile Value | No. of Homes Greater than AL | Levels in Treated Water | Likely Source in Drinking Water          |
| Copper  | ppb  | 1300        | N/A       | 313                               | 0 out of 50                  | 1.1 - 13.3              | Corrosion of household plumbing systems  |
| Lead  | ppb  | 15          | 0         | 2.0                               | 1 out of 50                  | Not Detected to 2.1     | Corrosion of household plumbing systems  |