2015 Consumer Confidence Report

Water System Name: **Athena Terrace Mutual Water Co.** Report Date: **5/4/2016**

We test the drinking water quality for many constituents as required by State and Federal Regulations. This report shows the results of Total Coliform Bacteria and Fecal Coliform for the period of January 1 – December 31, 2015, and Chemical Analysis conducted in 2010, 2013, 2014 and 2015.

Este informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

Type of water source(s) in use: **Well**

Name & location of source(s): **Well 01 and Well 02 on Maryannis Dr., Santa Rosa, CA**

Drinking Water Source Assessment information: Conducted for Well 01 on January, 2002.
The source is considered most vulnerable to the following activities: Housing – high density. Wells – Water supply.

Discussion of Vulnerability: There have been no contaminants detected in the water supply, however the source is still considered vulnerable to activities located near the drinking water source.

A copy of the complete assessment may be viewed at:
Drinking Water Field Operations Branch
50 D Street, Suite 200
Santa Rosa, CA 95404

You may request a summary of the assessment be sent to you by contacting Office Representative at:
Phone: (707) 576-2145 Fax: (707) 576-2722

Time and place of regularly scheduled board meetings for public participation:
Annual meetings take place between July and Dec, and are announced at least two weeks in advance.

For more information, contact **Gian Silipo** *Phone:* **(707)-527-0830**

TERMS USED IN THIS REPORT:

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 are set to protect the odor, taste, and appearance of drinking water.

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

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the health at the MCL levels.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

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 Environmental Protection Agency.

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 (USEPA).

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

ppb: parts per billion or micrograms per liter (ug/L)

ppt: parts per trillion or nanograms per liter (ng/L)

pCi/L: picocuries per liter (a measure of radiation)

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, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- *Inorganic contaminants*, such as salts and metals, that 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*, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.

- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- *Radioactive contaminants*, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, USEPA and the state Department of Health Services (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that must provide the same protection for public health.

Tables 1, 2, 3, 4, and 5 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The Department requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of the water quality, are more than one year old.

TABLE 1 - SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants (to be completed only if there was a detection of bacteria)	**Highest No. of detections**	**No. of months in violation**	**MCL**	**MCLG**	**Typical Source of Bacteria**
Total Coliform Bacteria	(In a mo.) **2**	**1**	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or *E. coli*	(In the year) 0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or *E. coli*	0	Human and animal fecal waste

TABLE 2 - SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (to be completed only if there was a detection of lead or copper in the last sample set)	**No. of samples collected**	**90th percentile level detected**	**No. Sites exceeding AL**	**AL**	**MCLG**	**Typical Source of Contaminant**
Lead (ppb) **6/22/15**	**5**	< 5	0	15	2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppm) **6/22/15**	**5**	< 0.51	0	1.3	0.17	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.

TABLE 3 - SAMPLING RESULTS FOR SODIUM AND HARDNESS

Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**PHG (MCLG)**	**Typical Source of Contaminant**
Sodium (ppm)	05/30/13	33 Well 1 28 Well 2	N/A	none	none	Generally found in ground and surface water
Hardness (ppm)	05/30/13	360 W1 430 W2	N/A	none	none	Generally found in ground and surface water

***Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided on the next page.*

TABLE 4 - DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Fluoride (ppm)	05/30/13	0.37 W1 0.38 W2	N/A	2	0.1	
Nitrate (as NO3) (ppm)	05/21/15	4.8 W1 < 2.0 W2	N/A	45	45	
Nitrate (as N) (ppm)	11/20/15	1.2 W1 < 0.4 W2	N/A	10	0.4	

TABLE 5 - DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
*** Iron** (ppb)	**11/20/15** 1/30/13	**740 W1** <100 W2	N/A	300	N/A	Leaching from natural deposits; industrial wastes.
*** Manganese** (ppb)	**11/20/15**	**190.0 W1/W2**	N/A	50	N/A	Leaching from natural deposits.
*** Turbidity** (NTU)	05/30/13 **09/17/13**	1.4 W1 **14 W2**	N/A	5	N/A	Soil run off.
Chloride (ppm)	05/30/13	73 W1 50 W2	N/A	500	N/A	
Sulfate (ppm)	05/30/13	150 W1 230 W2	N/A	500	N/A	

***Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided below.*

Additional General Information On Drinking Water

All 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 the 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 (1-800-426-4791).

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 (1-800-426-4791).

Summary Information for Contaminants Exceeding an MCL or AL, or a Violation of any Treatment or Monitoring and Reporting Requirements

1. **Iron, Manganese, and Turbidity MCL violation** – Iron, Manganese, and Turbidity were found at levels that exceed the secondary MCL of 300 ppm, 50 ppb, and 5 NTU respectively. These levels were set to protect you against unpleasant aesthetic effects such as color, taste, odor and the staining of plumbing fixtures, i.e. tubs and sinks, and clothing while washing. The high levels of Iron and Turbidity are due respectively to leaching of natural deposits and soil run off.

ATMW Co. water from both Wells 01 and 02 has been tested for the following additional substances at **Trace** or **Non Detectable Levels:**
Chromium hexavalent (CrVI) Analysis Results as of
10/18/14: 9.3 ug/L at Well 1, and 1.0 ug/L at Well 2.
01/06/15: 0.91 ug/L at Well 1

Non Detectable Levels:
Chromium hexavalent (CrVI) Analysis Results as of
04/24/15 Well 1

Regulated Organic Chemicals, as of May 7, 2010: Molinate (ORDRAM), Thiobencarb (BOLERO), Alachlor (ALANEX),

Regulated Organic Chemicals, as of March 13, 2013: Benzene, Carbon Tetrachloride, 1,2-Dichlorobenzene (o-DCB), 1,4-Dichlorobenzene (p-DCB), 1,1-Dichloroethane (1,1-DCA), 1,2-Dichloroethane (1,2-DCA), 1,1-Dichloroethylene (1,1-DCE), cis-1,2-Dichloroethylene (c-1,2-DCE), trans-1,2-Dichloroethylene (t-1,2-DCE), Dichloromethane (Methylene Chloride), 1,2-Dichloropropane, Total 1,3-Dichloropropene, Ethyl Benzene, Monochlorobenzene (Clorobenzene), Styrene, 1,1,2,2-Tetrachloroethane, Tetrachloroethylene (PCE), Toluene, 1,1,1-Trichloroethane (1,1,1-TCA), 1,1,2-Trichloroethane (1,1,2-TCA), Trichloroethylene (TCE), Trichlorofluoromethane (FREON 11), Vinyl Chloride (VC), m-Xylene, m,p-Xylene, o-Xylene, p-Xylene.

Regulated Organic Chemicals, as of May 23, 2013: Endrin, Lindane (gamma-BHC), Methoxychlor, Toxaphene, Chlordane, Heptachlor, Heptachlor EPOXIDE, Atrazine (AATREX), Simazine (PRINCEP), Alachlor (ALANEX), Bentazon (BASAGRAN), 2,4-D, 2,4,5-TP (SILVEX), Carbofuran (FURODAN), Dalapon, Dinoseb (DNBP), Diquat, Endothall, Hexachlorobenzene, Hexachlorocyclopentadiene, Oxamyl (Vydate), Pentachlorophenol (PCP), Picloram.

Regulated Organic Chemicals, as of September 17, 2014: Trihalomethanes (TTHMs) which include Bromodichloromethane, Bromoform, Chloroform (Trichloromethane), Dibromochloromethane.

Regulated Organic Chemicals, as of September 17, 2014: Haloacetic Acids (HAA5) which include Monochloroacetic Acid (MCAA), Dichloroacetic Acid (DCAA), Trichloroacetic Acid (TCAA), Monobromoacetic Acid (MBAA), Dibromoacetic Acid (DBAA).

Regulated Organic Chemicals, as of September 28, 2015: Ethylene Dibromide (EDB).

Radiological Chemicals as of September 28, 2015:
Well 1 Gross Alpha, Radium 1.94 pCi/L.
Well 2 Gross Alpha, Radium 1.27 pCi/L.

Unregulated Organic Chemicals as of April 1, 2013: tert-Amyl Methyl Ether (TAME), Bromobenzene, Bromochloromethane, Bromomethane (Methyl Bromide), tert-Butyl Alcohol (TBA), n-Butylbenzene, sec-Butylbenzene, tert-Butylbenzene, Chloroethane, 2-Chloroethylvinyl Ether, Chloromethane (Methyl Chloride), 2-Chlorotoluene, 4-Chlorotoluene, Dibromomethane, 1,3-Dichlorobenzene (m-DCB), Dichlorodifluoromethane (FREON 12), 1,3-Dichloropropane, 2,2-Dichloropropane, 1,1-Dichloropropene, Ethyl tert-Butyl Ether (ETBE), Hexachlorobutadiene, Isopropylbenzene (Cumene), p-Isopropyltoluene, n-Propylbenzene, 1,1,1,2-Tetrachloroethane, 1,2,3-Trichlorobenzene, 1,2,3-Trichloropropane, 1,2,4-Trimethylbenzene, 1,3,5-Trimethylbenzene.

Unregulated Organic Chemicals as of May 7, 2010: Bromacil (HYVAR), Butachlor, Prometryn (CAPAROL) Propachlor.

Unregulated Organic Chemicals as of May 23, 2013: Aldicarb (TEMIK), Aldicarb Sulfone, Aldicarb Sulfoxide, Carbaryl (Sevin), Dicamba (BANVEL), 3-Hydroxycarbofuran, Methomyl.

Agricultural Chemicals as of May 23, 2013: 2,4-DB, Methiocarb (MESUROL), Propoxur (BAYGON), 2,4,5-T.

Additional Analyses as of November 1, 2013: Asbestos

Trace Levels not exceeding applicable MCL values:
Regulated Organic Chemicals as of September 12, 2013: Trihalomethanes (TTHMs which include Bromodichloromethane, Bromoform, Chloroform (Trichloromethane), Dibromochloromethane.
Regulated Organic Chemicals as of May 7, 2010: Methyl tert-Butyl Ether (MTBE).

Unregulated Organic Chemicals as of May 7, 2010: Diazinon, Dimethoate (CYGON), Metolachlor, Mtribuzin.
Other Chemical as of May 7, 2010: Perchlorate.

ATMW Co. water from both Wells 01 and 02 has been tested for the following additional substances in concentrations **not exceeding applicable MCL values:**

Inorganic Chemicals, as May 30, 2013: Calcium (Ca), Magnesium (Mg), Potassium (K), Aluminum (Al), Antimony (Sb), Arsenic (As), Barium (Ba), Beryllium (Be), Cadmium (Cd), Chromium (Cr), Copper (Cu), Mercury (Hg), Nickel (Ni), Selenium (Se), Silver (Ag), Thallium (Th), Zinc (Zn), Nitrite as Nitrogen (N).
Anions, as of May 30, 2013: Total Alkalinity (as CaCO3), Hydroxide (OH), Carbonate (CO3), Bicarbonate (HCO3), Sulfate (SO4), Chloride (Cl), Nitrate (NO3), Fluoride (F), Perchlorate (CLO4).