

ELY MUNICIPAL WATER DEPARTMENT

Consumer Confidence Report – 2017

Covering Calendar Year – 2016

This brochure is a snapshot of the quality of the water that we provided last year. Included are the details about where your water comes from, what it contains, and how it compares to Environmental Protection Agency (EPA) and state standards. We are committed to providing you with information because informed customers are our best allies. It is important that customers be aware of the efforts that are continually being made to improve their water systems. To learn more, please attend any of the regularly scheduled meetings. **For more information please contact Raul Naranjo at 801-440-2790.**

Your water comes from:

Source Name	Source Water Type
17TH & M ST WELL	Ground Water
10TH & M ST WELL	Ground Water
WELL RW 7P	Ground Water
GOLF COURSE WELL PWCOE 09-05	Ground Water
WELL RW-6P	Ground Water
NORTH ST WELL	Ground Water
TERRACE WELL PWCOE 09-02	Ground Water

We add disinfectant to your water to protect you against microbial contaminants. The Safe Drinking Water Act (SDWA) requires states to develop a Source Water Assessment (SWA) for each public water supply that treats and distributes raw source water in order to identify potential contamination sources. The state has completed an assessment of our source water. For results of the source water assessment, please contact us.

Message from EPA

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune compromised persons, such as those 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. EPA/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).

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

The sources of drinking water (both tap water and bottled water) included 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 before we treat it 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, 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 may come from a variety of sources such as storm water run-off, agriculture, and residential users.

Radioactive contaminants, can be naturally occurring or the result of mining activity

Organic contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, may also come from gas stations, urban storm water run-off, and septic systems.

In order to ensure that tap water is safe to drink, EPA prescribes regulation which limits the amount of certain contaminants in water provided by public water systems. We treat our water according to EPA's regulations. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Our water system EPA tested a minimum of 7 samples per month in accordance with the Total Coliform Rule for microbiological contaminants. Coliform bacteria are usually harmless, but their presences in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio.

Water Quality Data

The tables following below list all of the drinking water contaminants that were detected during the 2016 calendar year. The presence of these contaminants does not necessarily indicate that the water poses a health risk. Unless noted, the data presented in this table is from testing done January 1- December 31, 2016. The state 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, is more than one year old. **The bottom line is that the water that is provided to you is safe.**

Terms & Abbreviations

Maximum Contaminant Level Goal (MCLG): the “Goal” is the level of a contaminant in drinking water below which there is no known or expected risk to human health. MCLG’s allow for a margin of safety.

Maximum Contaminant Level (MCL): the “Maximum Allowed” MCL is the highest level of a contaminant that is allowed in drinking water. MCL’s are set as close to the MCLG’s as feasible using the best available treatment technology.

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

Treatment Technique (TT): a treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Residual Disinfectant Level (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.

Maximum Residual Disinfectant Level Goal (MRDLG): the level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG’s do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Non-Detects (ND): laboratory analysis indicates that the constituent is not present.

Parts per Million (ppm) or milligrams per liter (mg/l)

Parts per Billion (ppb) or micrograms per liter (µg/l)

Picocuries per Liter (pCi/L): picocuries per liter is a measure of the radioactivity in water.

Millirems per Year (mrem/yr): measure of radiation absorbed by the body.

Million Fibers per Liter (MFL): million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

Nephelometric Turbidity Unit (NTU): nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Water Quality Data Testing Results for Ely Municipal Water Department

Disinfection By-Products	Monitoring Period	RRA	Range	Unit	MCL	MCLG	Typical Source
TTHM	2014	1	0.5	ppb	80	0	Byproduct of drinking water disinfection

Lead and Copper	Date	90 th Percentile	Unit	AL	Sites over AL	Typical Source
Copper	2016	0.082	ppm	1.3	0	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching of wood preservatives.
Lead	2016	1.4	ppb	15	0	Corrosion of household plumbing systems; Erosion of natural deposits.

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
Arsenic	9/8/16	5.4	2.8 – 5.4	µg/L	10	0	Erosion of natural deposits; runoff from orchards, runoff from glass and electronics production wastes.
Barium	9/8/16	0.12	0.043 - 0.12	mg/L	2.0	2.0	Discharging of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Benzo(a)pyrene	9/8/16	0.022	0.022	µg/L	0.002mg/L	0	Leaching from linings of water storage tanks and distribution lines
Diquat	9/8/2016	2.3	2.3	ug/L	20	20	Runoff from herbicide use
Fluoride	9/8/16	0.13	0.11-0.13	mg/L	4.0	4.0	Natural deposit; Water additive which promotes strong teeth.
Hexachlorobenzene	9/8/16	0.0071	0.0071	µg/L	0.05mg/L	0	Discharge from metal refineries and agricultural chemical factories

Regulated Contaminants	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
Lasso	9/8/2016	0.03	0.03	ppb	2	0	Runoff from herbicide used on row crops
Nitrate-Nitrite	11/2/2016	8.9	0.14 - 8.9	ppm	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	9/8/16	0.0023	0.0023	mg/L	5	0	Discharge from petroleum refineries; erosion of natural deposits; discharge from mines
Simazine	9/8/2016	0.02	0.02	ppb	4	4	Herbicide runoff

Radionuclides	Collection Date	Highest Value	Range	Unit	MCL	MCLG	Typical Source
Combined Radium (-226 & 228)	9/8/16	0.4	0.4	pCi/L	5	0	Erosion of natural deposits
Gross Alpha, Excl. Radon & U	9/8/16	2.9	2.7 - 2.9	pCi/L	15	0	Decay of natural and man-made deposits

Secondary Contaminants	Collection Date	Highest Value	Range	Unit	SMCL	MCLG
Bromacil	9/8/2016	0.05	0.05	µg/L		
Butachlor	9/8/2016	0.04	0.04	µg/L		
Chloride	11/2/2016	65	2.8 - 65	mg/L	400	
Dimethoate	9/8/2016	0.04	0.04	µg/L		
Iron	9/8/2016	0.54	0.19 - 0.54	mg/L	0.6	
Magnesium	9/8/2016	20	13 - 20	mg/L	150	
Manganese	9/8/2016	0.043	0.016 - 0.043	mg/L	0.1	
Metolachlor	9/8/2016	0.03	0.03	ppb		70
Metribuzin	9/8/2016	0.03	0.03	µg/L		0.2
Odor	9/8/2016	17	4 - 17	TON	3	
pH	9/8/2016	8.37	8 - 8.37	pH	8.5	
Sodium	9/8/2016	15	4.2 - 15	mg/L	200	20
Sulfate	9/8/2016	25	8.5 - 25	mg/L	500	
TDS	11/2/2016	510	160 - 510	mg/L	1000	
Temperature (Centigrade)	8/6/2015	23.8	22.5 - 23.8	C		
Thiobencarb (Bolero)	9/8/2016	0.03	0.03	UG/L		
Total Kjeldahl Nitrogen (in water)	11/2/2016	5.3	5.3	MG/L		
Trithion	9/8/2016	0.05	0.05	UG/L		
Zinc	9/8/2016	0.026	0.026	MG/L	5	

Potential health effects of disinfections byproducts and man-made chemical compounds chiefly used as herbicides are liver, kidney or central nervous system problems and increased risk of cancer. These contaminants can be produced as part of the disinfection process of the drinking water. At this time we cannot determine if these contaminants are present in our water. As directed by NDEP, we need to sample on the prescribed dates later this year to return to compliance.

Health Information About Water Quality

While your drinking water meets EPA's standard for lead, it is present in low levels. Infants and children are typically more vulnerable to lead in drinking water than the general population. 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 you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4761).

While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. 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.

Violations

During the 2016 calendar year ELY MUNICIPAL WATER DEPARTMENT is required to include an explanation of the violation(s) in the table below and the steps taken to resolve the violation(s) with this report. In 2016, the City of Ely failed to tests for Total Trihalomethane (TTHM) and Haloacetic Acid (HAA5) under Disinfection Byproduct Rule.

Type	Category	Analyte	Compliance Period
Once per Year	Failure to Monitor	HAA5	Jul – Sep 2016 (3 rd Qtr)
Once per Year	Failure to Monitor	TTHM	Oct – Dec 2016 (4 th Qtr)

Potential health effects of disinfections byproducts are liver, kidney or central nervous system problems and increased risk of cancer. These contaminates can be produced as part of the disinfection process of the drinking water. At this time we cannot determine if these contaminants are present in our water. As directed by NDEP, we need to sample on the prescribed dates later this year to return to compliance.

