2015 Consumer Confidence Report

Water System Name: **City of Tehama** Report Date: 02/29/2016

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2015 and may include earlier monitoring data.

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

Type of water source(s) in use: 2 groundwater wells

Name & general location of source(s): Well 3 and Well 4 are located in the City of Tehama

Drinking Water Source Assessment information: A source water assessment was completed 10/2001 for Well 3 and 5/2003 for Well 4 serving the City of Tehama Water System. The evaluations showed that the sources are considered most vulnerable to the following activities not associated with any detected contaminants: high density septic systems. A re-assessment in 2010 and again in 2015 showed the evaluation to remain unchanged. Copies of the complete assessments may be viewed at: DHS Valley District Office, 364 Knollcrest Dr., Suite 101, Redding, CA 96002, 530-224-4800 or at City of Tehama, 250 Cavalier Dr., Tehama, CA 96090, 530-384-1501.

Time and place of regularly scheduled board meetings for public participation:
2nd Tuesday of each month at 6 PM at Tehama City Hall, 250 Cavalier Dr., Tehama, CA 96090

For more information, contact: Carolyn Steffan, City Clerk Phone: (530)384-1501

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.

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).

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 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

Primary Drinking Water Standards (PDWS): MCLs and MRDLs 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.

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

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

Variances and Exemptions: State Board permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit

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 (ng/L)

ppq: parts per quadrillion or picogram per liter (pg/L)

health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.	**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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- *Pesticides and herbicides*, that 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, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- *Radioactive contaminants*, that 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, the USEPA and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, 5, 7, and 8 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 State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. 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 (complete if bacteria detected)	**Highest No. of Detections**	**No. of months in violation**	**MCL**	**MCLG**	**Typical Source of Bacteria**
Total Coliform Bacteria	(In a mo.) 0	0	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 (complete if lead or copper detected in the last sample set)	**Sample Date**	**No. of samples collected**	**90th percentile level detected**	**No. sites exceeding AL**	**AL**	**PHG**	**Typical Source of Contaminant**
Lead (ppb)	9/1/2015	5	ND	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	9/1/2015	5	.037	0	1.3	0.3	Internal corrosion of household 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) Well 3 Well 4	/8/2014 8/2012	26 25		none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm) Well 3 Well 4	6/2014 8/2012	119 110		none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

***Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.*

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 [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Nitrate(N03) Well 3 Well 4	8/2015 8/2015	0.8 1.4		10 mgl	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.
Flouride (ppm) Well 3 Well 4	6/2014 6/2009	0.1 0.1		2.0 ppm	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Barium(ppm) Well 3 Well 4	6/2014 6/2009	0. 102 0. 116		1 ppm	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits.
Chromium(ppb) Well 3 Well 4	6/2014 6/2009	5 3		50 ppb	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits.
Mercury(ppb) Well 3 Well 4	6/2014 6/2009	.0200 .0200		2 ppb	1.2	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and cropland.
Nickle (ppb) Well 3 Well 4	6/2014 6/2009	10 5		100 ppb	12	Erosion of natural deposits; discharge from metal factories
Radium 228 Well 3 Well 4	12/2007 3/2007	.0090 .1620		5 pCi/L	(0)	Erosion of natural deposits.
Gross Alpha Well 3 Well 4	5/2015 4/2007	.8430 .2890		15 pCi//L	(0)	Erosion of natural deposits.
Arsenic(ppb) Well 3 Well 4	8/2014 8/2012	3 3		10 ppb	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes.

TABLE 5 – DETECTION OF CONTA.5
.5MINANTS 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
Aluminum Well 3 Well 4	8/2014 6/2009	10		200 ppb		Erosion of natural deposits; residual from some surface water treatment processes.
Color Well 3 Well 4	8/2014 6/2009	5 5		15 Units		Naturally occurring organic materials.
Chloride (ppm) Well 3 Well 4	8/2014 8/2009	15.000 18.000		500.000		Runoff / leaching from natural deposits; seawater influence.
Copper (ppm) Well 3 Well 4	6/2014 6/2009	20 18		1000 ppb		Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

Foaming agents	Well 3 Well 4	8/2014 6/2009	0.1 0,1		0.5 mg/l	Municipal and industrial waste discharges.
Iron	Well 3 Well 4	8/2014 6/2009	30 50		300 ppb	Leaching from natural deposits; industrial wastes.
Odor threshold	Well 3 Well 4	8/2014 6/2009	1 1		3 TON	Naturally occurring organic materials.
PH, Laboratory	Well 3 Well 4	8/2014 8/2015	7.7 6.7			
Manganese	Well 3 Well 4	8/2014 6/2009	0.5		50 ppb	Leaching from natural deposits
MTBE Methyl-tert-butyl ether 4	Well 3	4/2013 7/2010	1 1		5 ppb	Leaking underground storage tanks; discharge from petroleum and chemical factories.
Silver	Well 3 Well 4	8/2014 6/2009	1 1		100 ppb	Industrial discharge
TDS (ppm) Total dissolved solids #4	Well 3	8/2014 8/2015	220 240		1000 ppm	Runoff / leaching from natural deposits.
Sulfate (ppm)	Well 3 Well 4	8/2014 8/2015	8.800 18		500.000	Runoff / leaching from natural deposits; industrial wastes.
Turbidity	Well 3 Well 4	8/2014 6/2009	0.3 0.2		5 NTU	Soil runoff
Zinc	Well 3 Well 4	8/2014 8/2015	50 10		5000 Ppm	Runoff/leaching from natural deposits; industrial wastes.

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**Notification Level**	**Health Effects Language**
Vanadium (ppb) Well 4	7/2009	14		50 ppb	The babies of some pregnant women who drink water containing vanadium in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals.

***Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.*

Additional General Information on 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 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).

Lead-Specific Language for Community Water Systems: 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 C;ity of Tehama_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. [Optional: If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.] 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 at http://www.epa.gov/lead.

WATER RATES are changed each year on July 1 by the increase in the Construction Cost Index.
If you have property occupied by tenants, please give them a copy of this notice.

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT				
Violation	**Explanation**	**Duration**	**Actions Taken to Correct the Violation**	**Health Effects Language**
21-15C-032	**Lead & Copper samples not taken In 2012**	**Samples to be taken summers of 2016 & 2018**	**Sample taken 9/2015 Sample to be taken summer of 2016.**	*****

***Lead and Copper Health Effects Language**
Lead – Infants and children who drink water containing lead in excess of the action level may experience delays in their physical or mental development. Children may show slight deficits in attention span and learning abilities. Adults who drink this water over many years may develop kidney problems or high blood pressure.
Copper – Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time may experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years may suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.