2018 Consumer Confidence Report

Water System Name: 148	Cast Water CompanyReport Date:10 November 2019				
	uality for many constituents as required by s the period of January 1 to December 31, 2018	v	· ·		
Este informe contiene info Company a 760-377-5695 p	rmación muy importante sobre su agua pa ara asistirlo en español.	ra beber. Favo	r de comunicarse 148 East Water		
Type of water source(s) in use	: Well				
Name & general location of so	ource(s): 6158 Norman Court, Inyokern, 6	CA			
Drinking Water Source Asses	sment information: source water assess	sment and vuln	erability assessment not done		
Time and place of regularly so	heduled board meetings for public participation	on: meetin	gs are not regularly scheduled,		
1 0 5		howev call a r	er any member of the co-op may neeting at any time by calling 7-5695		
For more information, contact	: Mike Martyn	Phone:	760-377-5695		

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 (U.S. EPA).

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 health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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: Permissions from the State Water Resources Control Board (State Board) to exceed an MCL or not comply with a treatment technique under certain conditions.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

ND: not detectable at testing limit

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

ppb: parts per billion or micrograms per liter ($\mu g/L$)

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

ppq: parts per quadrillion or picogram per liter (pg/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 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 byproducts 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 U.S. EPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, 5, and 6 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. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA									
Microbiological Contaminants (complete if bacteria detected)	Highest N Detectio		f No. of Months in Violation		MCL			MCLG	Typical Source of Bacteria
Total Coliform Bacteria (state Total Coliform Rule)	0		0		1 positive monthly sample			0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule)	0		A routine sample and a repeat sample are total coliform posit and one of these is also fecal coliform or <i>E. coli</i> positive		positive, cal	0	Human and animal fecal waste		
<i>E. coli</i> (federal Revised Total Coliform Rule)	0			0		(a)		0	Human and animal fecal waste
(a) Routine and repeat samples are total coliform-positive and either is <i>E. coli</i> -positive or system fails to take repeat samples following <i>E. coli</i> -positive routine sample or system fails to analyze total coliform-positive repeat sample for <i>E. coli</i> . 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. Samp Colle	ples	90 th Percentile Level Detected	Exceeding	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	Jan 20 2019	5		None Detected	0	15	0.2	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	Jan 20 2019	5		0.103 mg/L or ppm	0	1.3	0.3	Not applicable	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

			RESULTS FOR	SODIUM A		NESS
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Sodium (ppm)	2/22/2018	55	0.50 MDL	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2/225/2018	110	0.50 MDL	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring
TABLE 4 – DET	TECTION O	F CONTAMIN	ANTS WITH A	PRIMARY	DRINKING	WATER STANDARD
					PHG	
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	(MCLG) [MRDLG]	Typical Source of Contaminant
Gross Alpha Particle Activity pCi/L	2/22/2018	5.03	1.06 MDL +/-0.365	15	0	Decay of natural and man-made deposits
	-		-		-	people who drink water containing
beta and photon emitters in ex Uranium pCi/L	2/22/2018	L over many year 5.6	s may have an incre 0.067 MDL	ased risk of g	getting cancer. 0.43	Decay of natural deposits
Oraniuni pCI/L	212212010	5.0	0.007 MDL	20	0.+3	Decay of natural deposits
Some people who drink water cancer.	containing ura	anium in excess of	the MCL over man	y years may l	nave kidney pr	oblems or an increased risk of getting
Arsenic ppb	2/22/2018	2.2	0.70 MDL	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Some people who drink water			he MCL over many	years may ex	xperience skin	damage or circulatory system
problems, and may have an in		ž ž	0.14 MDL	4	1	Discharge form metal
Beryllium ppb	2/22/2018	1.5	0.14 MDL	4	1	Discharge from metal refineries, coal-burning factories, and electrical, aerospace, and defense industries
Some people who drink water	containing be	ryllium in excess o	of the MCL over ma	ny years may	develop intest	
Fluoride ppm	2/22/2018	0.80	12 MDL	2.0	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Some people who drink water and tenderness of the bones.						ay get bone disease, including pain
Nitrate (as nitrogen, N) ppm	9/6/2016	2.1	0.10 PQL	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and
						sewage; erosion of natural deposits
						ome seriously ill and, if untreated,
may die because high nitrate I blueness of the skin. High nit						ptoms include shortness of breath and
Nitrite (as nitrogen, N)	9/6/2016	less than 0.050	0.050 PQL	1	1	Runoff and leaching from fertilizer
ppm	9/0/2010	less than 0.050	0.0501QL	1	1	use; leaching from septic tanks and sewage; erosion of natural deposits
Infants below the age of six m may die. Symptoms include s				the MCL m	ay quickly bec	ome seriously ill and, if untreated,
· · · ·				CONDAR	Y DRINKIN	G WATER STANDARD
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Turbidity in turbidity units	2/22/2018	0.17	0.10 MDL	5		Soil runoff
Turbidity has no health effects microbial growth. Turbidity n and parasites that can cause sy	nay indicate the	e presence of disea	se-causing organism	ns. These org	anisms include	

Sulfate ppm	2/22/2018	54	0.13 MDL	500	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 Lev	vel Health Effects Language		
1,2,3-trichloropropane	1/28/2019	none detected	0.0050 PQL	0.005	not known		

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 U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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. U.S. 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 (1-800-426-4791).

Lead-Specific Language: 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. 148 East Water Company 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 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 (1-800-426-4791) or at http://www.epa.gov/lead.

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			
Failed to send out Consumer Confidence Report on time	Forgot		Put on calendar	None			
Failed to get 1,2,3- trichloropropane testing done on time	Forgot		Put on calendar	None			

For Water Systems Providing Groundwater as a Source of Drinking Water

TABLE 7 – SAMPLING RESULTS SHOWING FECAL INDICATOR-POSITIVE GROUNDWATER SOURCE SAMPLES								
Microbiological Contaminants (complete if fecal-indicator detected) Total No. of Detections Sample Dates MCL [MRDL] PHG (MCLG) Typical Source of Contaminant								
E. coli	0		0	(0)	Human and animal fecal waste			
Enterococci	0		TT	N/A	Human and animal fecal waste			
Coliphage	0		TT	N/A	Human and animal fecal waste			