2018 Consumer Confidence Report

Water System Name:

Mid Valley Agricultural Services

Report Date:

03/19/19

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, 2018 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Mid Valley Agricultural Services a (209) 484-5003 para asistirlo en español.

Type of water source(s) in use:	Groundwater Well						
Name & general location of source	e(s): Well	at 5225 Oakdale/Waterford	Hwy. O	akdale	e, CA		
Drinking Water Source Assessme	nt information:	None Available					
Time and place of regularly sched	luled board mee	ings for public participation:		None	e		
For more information, contact:	Randy Johnson	n	Pho	one:	(209) 484-5003		
	T	ERMS USED IN THIS REF	PORT				

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 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: 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)

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 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, 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.

Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria	
Total Coliform Bacteria (State Total Coliform Rule)	(In a mo.)	0	1 positive monthly sample	0	Naturally present in the environment	
Fecal Coliform or <i>E. coli</i> (State Total Coliform Rule)	(In the year)	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive	0	Human and animal fecal waste	
E. coli (Federal Revised Total Coliform Rule)	(In the year)	0	(a)	0	Human and animal fecal waste	

(a) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.

Lead and Copper (and reporting units)	Sample Date	No. of Samples Collected	90 th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	2017	10	< 5	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	2017	10	8.0	1*	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)	04/10/15	30		None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	04/10/15	280		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 – DE	TECTION (OF CONTAM	INANTS WIT	TH A PRIN	MARY DRIN	KING WATER STANDARD		
Chemical or Constituent (and reporting units)	Sample Date	Average Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant		
Nitrate as Nitrogen (ppm) (At the Well)	2018	9	8 - 12*	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits		
Nitrate as Nitrogen (ppm) (After the Filter)	2018	0.6	< 0.4 - 2	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits		
Gross Alpha (pCi/l)	2017	3	2 - 5	15	(0)	Erosion of natural deposits		
Uranium (pCi/l)	2017	2	2 - 3	20	0.4	Erosion of natural deposits		
TABLE 5 – DETI	ECTION OF	CONTAMIN	IANTS WITH	I A SECON	NDARY DRI	NKING WATER STANDARD		
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant		
Total Dissolved Solids (ppm)	04/10/15	430		1000	N/A	Runoff/leaching from natural deposits		
Specific Conductance (umho/cm)	04/10/15	639		1600	N/A	Substances that form ions when in water; seawater influence		
Chloride (ppm)	04/10/15	28		500	N/A	Runoff/leaching from natural deposits; seawater influence		
Sulfate (ppm)	04/10/15	12		500	N/A	Runoff/leaching from natural deposits' industrial wastes		
Color (unit)	04/10/15	1		15	N/A	Naturally-occurring organic materials		
Turbidity (NTU)	04/10/15	0.1		5	N/A	Soil runoff		
Zinc (ppm)	04/10/15	0.4		5	N/A	Runoff/leaching from natural deposits		
	TABLE	6 - DETECT	ION OF ADI	DITIONAL	CONTAMI	NANTS		
Chemical or Constituent (and reporting units)	Sample Date	Range of Detection	A CONTRACTOR OF THE PROPERTY O	Health Effects Language				
Distribution System Chlorine Residual (ppm)	2018	< 0.1 - 3.0		Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes at nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.				
Distribution System Haloacetic Acids (ppb)	08/20/18	2	60	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.				
Distribution System Total Trihalomethanes (ppb) Any violation of an MCL or	08/20/18		80	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.				

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

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.

Nitrate as Nitrogen in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate-N levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider.

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

Copper levels are routinely monitored throughout the drinking water system. In August of 2017, one of ten sites chosen showed copper levels just over the maximum allowable limit. This single site represents only 10% of the total ten samples chosen. According to State regulations, the whole system is within compliance if 10% or less of the total samples collected exceed the maximum allowable level. Therefore, the overall copper levels in the drinking water in 2017 were within acceptable limits and considered safe to drink.

In response to the high nitrate found at the well, Mid Valley Ag operates a treatment system to reduce the nitrate levels to within acceptable levels. Monthly testing after the filter shows that the treatment system is effectively removing nitrate.