2019 Consumer Confidence Report Spence Road Water System #5 June 28, 2020

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 to December 31, 2019 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse MCSI Water Systems Management a (831) 659-5360 para asistirlo en español.

Type of water source(s) in use:	n use: The water system has one groundwater well.							
Name & general location of source	(s): Well #1 is located on Spence Road.							
Drinking Water Source Assessment information: The assessment was not available at the time of this report. Contact								
Monterey County Health Bureau at (831) 755-4507 for additional information.								
Time and place of regularly schedu	N/A							
For more information, contact:	MCSI Water Systems Management	Phone: (831) 659-5360						

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 (μ 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)			of Months Violation	Ν	ICL		MCLG	Typical Source of Bacteria	
Total Coliform Bacteria (state Total Coliform Rule)	(In a more 0	nth)	0	1 positive month	nly sampl	e ^(a)	0	Naturally present in the environment	
Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule)	(In the y	ear)	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				Human and animal fecal waste	
<i>E. coli</i> (federal Revised Total Coliform Rule)	(In the y	ear)	0	(b)			0	Human and animal fecal waste	
 (a) Two or more positive monthly samples is a violation of the MCL (b) 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. of Samples Collected	90 th Percentile Level Detected	Exceeding	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant	
Lead (µg/L)	8/2019	5	2	0	15	0.2	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits	
Copper (mg/L)	8/2019	5	0.396	0	1.3	0.3	Not applicable	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 (mg/L)	8/2016	54		None	None	Salt present in the water and is generally naturally occurring	
Hardness (mg/L)	8/2016	288		None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring	
TABLE 4A – DETEC	TION OF	CONTAM	IINANTS W	'ITH A <u>PR</u>	<u>RIMARY</u> DI	RINKING WATER STANDARD	
Chemical or Constituent (and reporting units)	Sample Date	Level Detected (AVG)	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant	
Arsenic (µg/L)	8/2019	3.4		10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes	
Chromium Total (µg/L)	8/2016	16		50	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits.	
Fluoride (mg/L)	8/2016	0.4		2	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories	
Nitrate (mg/L) (as Nitrogen, N)	2019	(11.2)*	7.0 – 17.7 *	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits	
Nitrate (mg/L) (as Nitrogen, N) - Distribution	2019	(12.64)*	0.1 – 17.6 *	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits	
Selenium (µg/L)	8/2016	9		50	30	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)	
	DF	ETECTION	OF RADIOA	CTIVE CO	ONTAMINAN	NTS	
Gross Alpha Activity (pCi/L)	12/2017	5.78		15	(0)	Erosion of natural deposits	
Uranium (pCi/L)	12/2017	3.2		5	0.019	Erosion of natural deposits	
TABLE 4B – DETECTION	OF CONTA	MINANTS	S WITH A <u>P</u>	RIMARY	DRINKING	WATER STANDARD-DISTRIBUTION	
Chlorine (mg/L)	2019	(0.74)	0.12 – 1.89	[MRDL=4 (as Cl ₂)]	[MRDLG=4 (as Cl ₂)]	Drinking water disinfectant added for treatment	
Chlorine residuals are taken in the	field and rep	orted on the	coliform repo	rt.			
TABLE 5 – DETECTI	ION OF CO	ONTAMIN	IANTS WIT	'H A <u>SECO</u>	<u>ONDARY</u> D	RINKING WATER STANDARD	
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant	
Chloride (mg/L)	8/2016	85		500	N/A	Runoff/leaching from natural deposits; seawater influence	
Odor (Units)	8/2016	1		3	N/A	Naturally occurring organic materials	
Specific Conductance (µS/cm)	9/2017	820		1,600	N/A	Substances that form ions when in water; seawater influence	
Sulfate (mg/L)	8/2016	113		500	N/A	Runoff/leaching from natural deposits; industrial wastes	
Total Dissolved Solids (mg/L)	8/2016	543		1,000	N/A	Runoff/leaching from natural deposits	
Turbidity (NTU)	8/2016	0.1		5	N/A	Soil runoff	
Т	ABLE 6 –	DETECTI	ON OF UN	REGULA	FED CONT	AMINANTS	
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level		Health Effects Language	
Chromium-6 $(\mu g/L)^1$	08/2014	4.2					

 $^{^{1}}$ There is currently no MCL for hexavalent chromium. The previous MCL of 0.010 mg/L was withdrawn on September 11, 2017.

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. 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. 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. Spence Road Water Systems #5 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

• **Nitrate over MCL:* Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women.

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) [MRDLG]	Typical Source of Contaminant		
E. coli	(In the year) 0	2019	0	(0)	Human and animal fecal waste		

Summary Information for Fecal Indicator-Positive Groundwater Source Samples, Uncorrected Significant Deficiencies, or Groundwater TT

SPECIAL NOTICE FOR UNCORRECTED SIGNIFICANT DEFICIENCIES

The water system is deficient due to high nitrate results. Nitrate tests are performed monthly with public notification as required. The water system installed a nitrate removal pilot system. The post filtration results ranged 1.9 - 4.1 mg/L.

Summary Information for Federal Revised Total Coliform Rule Level 1 and Level 2 Assessment Requirements

Level 1 or Level 2 Assessment Requirement not Due to an E. coli MCL Violation

• During the past year we were not required to conduct a Level 1 or Level 2 assessment.