2020 Consumer Confidence Report

Water System Name: **Surrey Village Water Co. (#5200570)** Report Date: June 30, 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 - December 31, 2020 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: Two groundwater wells

Name & general location of source(s): Adobe Road Well #1 and Hill Well #2 (APN 27-190-15 and 27-160-12)

Drinking Water Source Assessment information: Source Assessment and Sanitary Survey available at the Tehama County Environmental Health Dept (633 Washington St., Room 36, Red Bluff). Source Water Protection Plan prepared June 2020

Time and place of regularly scheduled board meetings for public participation: Annual shareholder meetings are held on third Thursday of April each year. Regular board meetings are held approximately quarterly or as needed. Board meetings for shareholder input will be scheduled upon request.

For more information, contact: Chuck Schoendienst, Secretary Phone: (530) 840 6161

TERMS USED IN THIS REPORT

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine 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 why an E.coli MCL violation has occurred and/or why total coliform bacterial have been found in our water system on multiple occasions

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.

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.

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)

Quick Overview: There is a range of state mandated testing for our water system. Tests for coliform are conducted monthly, and arsenic on a quarterly basis. Tests for metals, secondary minerals, herbicides, and radioactive isotopes occur on a 3-year, 6-year, or 9-year cycle.
As in past years, the only contaminant found in 2020 at levels anywhere near the "Maximum Contaminant Level" is Arsenic. See Table 4 and the accompanying text.

Sources of Drinking Water and Contaminants that May be Present in Source 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 some 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*, can be naturally-occurring or be the result of oil and gas production and mining activities.

Regulation of Drinking Water and Bottled Water Quality: 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.

About Your Drinking Water Quality: Tables 1 through 7 list all of the drinking water contaminants that were detected during the most recent sampling for Surrey Village. 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	1	1	More than 1 sample in a month with a detection	0	Naturally present in the environment.
Fecal Coliform or *E. coli*	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**	**level detected**	**No. sites exceeding AL**	**AL**	**PHG**	**Typical Source of Contaminant**
Lead (ppb) See comment on lead in ***Additional General information*** below	8/13/19	5	ND	0	15ug/L	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

Copper (ppm) [distribution sample] Copper	8/13/19 7/13/20	5 1	ND and 62ug/L in one sample ND	0	1300 ug/L	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)	7/13/2020	23ppm	23ppm	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	7/13/2020	88.7 ppm	86.2	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
Arsenic -adobe well * Arsenic – hill well *	1/14/2020 4/13/2020 7/13/2020 10/12/20 1/14/2020 4/13/2020 7/13/2020 10/12/20	6 5	5-8 5-6		10	Dissolved natural minerals in the aquifer. Runoff from orchards, electronic firms.
Barium (ppm) -hill well adobe well	11/7/18	.03 .03	.03	2.8		Oil drilling waste and metal refineries, natural deposits.
Chromium (ppb) hill well adobe well	10/23/18	.62 .58	.58-.62	50	100	Steel and Pulp mills and chromium plating.
Nickel (ppb) -hill well adobe well	10/23/18	.66 .81	.66-.81	100	12	Erosion of natural deposits
Nitrate as N (ppm) hill adobe well Nitrate as N adobe Nitrate as N hill	10/23/18 7/13/20 7/13/20	.16 .22 ND ND	.16-.22	10	10	Runoff and leeching from fertilizer, leaching from septic tanks and sewage, erosion of natural deposits
Flouride (ppm) adobe 7/13/20	10/23/18	.14 ND	.14	2	1	Erosion of natural deposits, water additive promoting healthy teeth, discharge from factories/farms.
Gross Alpha	7/5/19	1.49-1.62	1.49-1.62		3	Leaching from natural deposits

TABLE 5 – DETECTION OF CONTAMINANTS 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
Manganese	8/14/17 7/13/2020	20 30		50		Leaching from natural deposits
Sulphate	8/14/17 7/13/2020	6 5.8		500		Leaching from natural deposits; industrial wastes
Chloride	8/14/17 7/13/2020	8 8		500		Leaching from natural deposits; seawater influence

Specific Conductance	8/14/17 7/13/2020	278 304		1,600		Substances that form ions when in water, seawater infleuence

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**Notification Level**	**Health Effects Language**

Additional information regarding the violation is provided later in this report.

TABLE 7 CONTTITUENTS TESTED FOR BUT NOT DETECTED DURING THIS REPORTING PERID

Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**Notification Level**	**Health Effects Language**
Aluminum, Antimony, Beryllium, Cadmium, Mercury, Nitrate-N, Selenium	11/7/18	ND	ND		
Silver	10/12/20	ND	ND		
Hydroxide, Carbonate, MBAS, Iron, Zink	7/13/20				
Herbicides: Simazine, Glyphosate and 2,4-D	7/13/2020	ND	ND		

Non-detected Contaminants

Several 2017-2020 water tests, usually of the water from both wells, did not detect the target constituent. Although reporting is not required, it can be helpful to know of such results. For example, nitrates (typically associated with septic tanks, feedlots or fertilizer use) are a concern in parts of the Antelope area just across the river and downstream from Surrey village. But the latest testing detected no nitrates in Surrey Village water. That doesn't mean there are zero nitrates, just that they are not present above the limit of detection of .4 parts per million.

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).

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 Surrey Village Water Company is responsible for providing high quality drinking water, but cannot control the variety of materials used in private plumbing facilities. 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 are concerned about lead in your water, you may wish to have your water tested (or volunteer to be one of the five homes sampled during the "every three years" lead tests. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline..

When **ARSENIC** levels are between 5 and 10 ppb, this notice is added at the request of the EPA and the Tehama County Dept of Environmental Health:

- While our drinking water meets the federal and state standard for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The U.S. Environmental Protection Agency 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.

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**
None				