

2019 Consumer Confidence Report

Water System Name: Sun Empire School

Report Date: 2019

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 Sun Empire School a 559-843-9205 para asistirlo en español.

Type of water source(s) in use: Groundwater

Name & general location of source(s): Well 1 is located near the east end of the School

Drinking Water Source Assessment information: There have been no contaminants detected in the water supply, however The source is still considered vulnerable to activities located near the drinking water source.

Time and place of regularly scheduled board meetings for public participation: Please call for an appointment

For more information, contact: Jock Millspaugh

Phone: 559-843-9031

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.

Variations 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 ($\mu\text{g/L}$)

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 No. of Detections | No. of Months in Violation | MCL | MCLG | Typical Source of Bacteria |
|---|---------------------------|----------------------------|--|------|--------------------------------------|
| Total Coliform Bacteria (state Total Coliform Rule) | (In a month) 5 | 1 – September 2019 | 1 positive monthly sample ^(a) | 0 | Naturally present in the environment |
| Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule) | (In the year) 0 | 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 year) 0 | 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 *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*.

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 | No. Sites Exceeding AL | AL | PHG | No. of Schools Requesting Lead Sampling | Typical Source of Contaminant |
|---|-------------|--------------------------|--|------------------------|-----|-----|---|---|
| Lead (ppb) | 9/27/19 | 10 | ND | 0 | 15 | 0.2 | Not applicable | Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits |
| Copper (ppm) | 9/27/19 | 10 | ND | 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 (ppm) | 2010 | 22 | 22 | None | None | Salt present in the water and is generally naturally occurring |
| Hardness (ppm) | 2010 | 85 | 85 | None | None | Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring |

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 as N (ppm) | 2019 | 3.9 | 3.9 | 10 | 10 | Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits |
| Chromium (Total) (ppb) | 2017 | 10 | 10 | 50 | 100 | Discharge from steel and pulp mills and chrome plating; erosion of natural deposits |
| Fluoride (ppm) | 2017 | 0.10 | 0.10 | 2.0 | 1 | Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories |
| Endothall (ppb) | 2014 | 45 | 45 | 100 | 94 | Runoff from herbicide use for terrestrial and aquatic weeds; defoliant |
| Gross Alpha (pCi/L) | 2014 | 1.4 | 1.4 | 15 | 0 | Erosion of 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 | SMCL | PHG (MCLG) | Typical Source of Contaminant |
|--|-------------|----------------|---------------------|-------|---------------|---|
| Specific Conductance (EC) (μ S/cm) | 2019 | 285 | 280 – 290 | 1,600 | N/A | Substances that form ions when in water; seawater influence |
| Chloride (ppm) | 2010 | 8.9 | 8.9 | 500 | N/A | Runoff/leaching from natural deposits; seawater influence |
| Sulfate (ppm) | 2010 | 5.2 | 5.2 | 500 | N/A | Runoff/leaching from natural deposits; industrial wastes |
| Total Dissolved Solids (TDS) (ppm) | 2010 | 210 | 210 | 1,000 | N/A | Runoff/leaching from natural deposits |

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

| Chemical or Constituent (and reporting units) | Sample Date | Level Detected | Range of Detections | Notification Level | Health Effects Language |
|--|-------------|----------------|---------------------|--------------------|-------------------------|
| Alkalinity (ppm) | 2019 | 95 | 93 – 97 | N/A | N/A |
| Calcium (ppm) | 2019 | 23.5 | 24 – 23 | N/A | N/A |
| Hexavalent Chromium (ppb) | 2014 | 9.7 | 9.6 – 9.8 | N/A | N/A |
| Potassium (ppm) | 2010 | 2.6 | 2.6 | N/A | N/A |
| Magnesium (ppm) | 2010 | 7.3 | 7.3 | N/A | N/A |

The State allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old

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. **Sun Empire School** 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 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 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

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year we were required to conduct 1 Level 1 assessment(s). 1 Level 1 assessment(s) were completed. In addition, we were required to take 1 corrective actions and we completed 1 of these actions.

During the past year 0 Level 2 assessments were required to be completed for our water system.

On September 17, 2019, a routine bacteriological sample was collected, which showed a presence of total coliform, no *E. coli* was detected. Five (5) repeat samples and one (1) well sample were collected, all six (6) samples showed a detection of total coliform, no *E. coli* was detected. At that time, it was determined that Well 01 was the source of contamination and repairs following immediate disinfection of the well was implemented. On September 23, 2019 five (5) additional repeat samples and one (1) well sample were collected – no coliform or *E. coli* was detected.
