

VOLCANO CSD
2019 CONSUMER CONFIDENCE REPORT

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

We're pleased to present to you this year's annual Consumer Confidence Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our main water source is the Cleveland Tunnel, which we filter and disinfect. We also use two wells during the summer months, and when the Cleveland Tunnel experiences periods of higher than normal turbidities which could affect the filtration process. The well water is treated to remove iron and manganese.

If you have any questions about this report or concerning your water utility, please contact George Barnes at (209) 256-4701 or Sharon Owens at (855) 522-8273. Regularly scheduled board meetings for public participation are held the first Monday of each even month at Armory Hall, Volcano CA at 7 pm.

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.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the State Water Resources Control Board (Water Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

All 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 at 1-800-426-4791.

Contaminants that may be present in source water include:

- *Microbiological 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*, that can be naturally-occurring or be a result of oil and gas production and mining activities.

A source water assessment was conducted in 2002 by Amador County Environmental Health for our water sources. A copy can be obtained by contacting ACEH at 209/223-6439. The sources are considered vulnerable to historic mining operations.

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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

W A T E R Q U A L I T Y D A T A

Volcano Community Service District routinely monitors for constituents in your drinking water according to Federal and State laws. Tables 1-6 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 table does not include contaminants that were not detected by laboratory testing. Unless otherwise indicated, the data contained in this report are for the monitoring period of January 1st to December 31st, 2019. The Water 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 results in this report, though representative, may be more than a year old.

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 (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.

Variations and Exemptions: State Board permission 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 (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)

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 mo.) 1 | 1 | 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 | 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 |
| <i>E. coli</i> (federal Revised Total Coliform Rule) | (In the year) 0 | 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*.

Total Coliform: *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 **ONE** Level 1 Assessment which was completed May 2019. 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.

ANY VIOLATIONS OF AN MCL OR AL ON TABLES 2-5 ARE ASTERISKED AND IN BOLD PRINT.

| Lead and Copper (units) | No. of samples collected | 90 th percentile level detected | No. Sites exceeding AL | AL | PHG (MCLG) | Typical Source of Contamination |
|-------------------------|--------------------------|--|------------------------|-----|------------|--|
| Lead (ppb) | 5 | ND | None | 15 | 0.2 | Internal corrosion of household plumbing systems, erosion of natural deposits. |
| Copper (ppm) | 5 | 0.3 | None | 1.3 | 0.17 | Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives. |

Note: 90th percentile level detected for 5 sites is the average of the 2 highest detections

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. Volcano CSD 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 or at <http://www.epa.gov/safewater/lead>.

| Cleveland Tunnel | | | | | | |
|---------------------------------|--------------|----------------|---------------------|------------|------|---|
| Chemical or Constituent (units) | Sample Dates | Level Detected | Range of Detections | PHG (MCLG) | MCL | Typical Source of Contamination |
| Sodium (ppm) | 4/5/17 | 7.5 | NA | none | none | Generally found in ground and surface water |
| Hardness (ppm) | 4/5/17 | 67 | NA | none | none | Generally found in ground and surface water |
| Well #1 and Well #2 | | | | | | |
| Chemical or Constituent (units) | Sample Dates | Level Detected | Range of Detections | PHG (MCLG) | MCL | Typical Source of Contamination |
| Sodium (ppm) | 06/21/19 | 24 | 11 - 33 | none | none | Generally found in ground and surface water |
| Hardness (ppm) | 06/21/19 | 248 | 129 - 181 | none | none | Generally found in ground and surface water |

| Cleveland Tunnel | | | | | | | |
|--|-------|---------------|----------------|---------------------|------------|-----|---|
| Chemical or Constituent | Units | Violation Y/N | Level Detected | Range of Detections | PHG (MCLG) | MCL | Typical Source of Contaminant |
| Fluoride <i>Sampled 4/5/17</i> | ppm | N | 0.11 | -- | 1 | 2.0 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Nitrate as N <i>Sampled 6/26/19</i> | ppm | N | 0.77 | NA | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |

TABLE 4 (continued) - Detection Of Contaminants With A Primary Drinking Water Standard

| Well #1 & Well #2 | | | | | | | |
|--|-------|---------------|---------|-------------|-----------|----------|---|
| Chemical or Constituent | Units | Violation Y/N | Average | Range | PHG | MCL | Typical Source of Contaminant |
| Fluoride <i>Sampled 6/21/19</i> | ppm | N | 0.11 | 0.10 – 0.12 | 1 | 2.0 | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Radiological, Gross Alpha <i>Sampled 4/1/15</i> | pCi/l | N | 2.2 | ND-4.4 | 0 | 15 | Erosion of natural deposits |
| Disinfection Byproducts & Disinfectant Residuals (Distribution System) | | | | | | | |
| Chemical or Constituent | Units | Violation Y/N | Average | Range | PHG | MCL | Typical Source of Contaminant |
| Chlorine <i>Sampled Monthly 2019</i> | ppm | N | 0.77 | ND – 1.2 | MRDLG = 4 | MRDL = 4 | Drinking water disinfectant added for treatment |
| Total Trihalomethanes <i>Sampled 8/29/19</i> | ppb | N | 1.8 | 1.1 – 2.4 | NA | 80 | By-product of drinking water chlorination |
| Haloacetic Acids <i>Sampled 8/29/19</i> | ppb | N | ND | --- | NA | 60 | By-product of drinking water disinfection |

TABLE 5 - Detection Of Contaminants With A Secondary Drinking Water Standard

| Cleveland Tunnel (Sampled 4/5/17) otherwise noted | | | | | | | |
|--|-------------------|---------------|----------------|---------------------|------------|------|--|
| Chemical or Constituent | Units | Violation Y/N | Level Detected | Range of Detections | PHG (MCLG) | MCL | Typical Source of Contaminant |
| Chloride | ppm | N | 3.7 | NA | NA | 500 | Runoff/leaching from natural deposits; sea water influence |
| Conductivity <i>(Sampled 4/17/18)</i> | Micro-mhos per cm | N | 180 | NA | NA | 1600 | Substances that form ions when in water; sea water influence |
| Sulfate | ppm | N | 2.7 | NA | NA | 500 | Runoff/leaching from natural deposits; industrial wastes |
| Total Dissolved Solids | ppm | N | 170 | NA | NA | 1000 | Runoff/leaching from natural deposits |
| Turbidity <i>(Weekly Field Samples)</i> | NTU | N | -- | 0.08-1.0 | NA | 5 | Soil runoff |
| Well #1 & Well #2 Sampled 6/21/19 Unless Otherwise Noted | | | | | | | |
| Chemical or Constituent | Units | Violation Y/N | Average | Range of Detections | PHG (MCLG) | MCL | Typical Source of Contaminant |
| Chloride | ppm | N | 60 | 4.7 – 6.4 | NA | 500 | Runoff/leaching from natural deposits; sea water influence |
| Color <i>(Treated Water)</i> | Color Units | N | 10 | ND | NA | 15 | Naturally-occurring organic materials |
| Conductivity | Micro-mhos per cm | N | 584 | 280 - 530 | NA | 1600 | Substances that form ions when in water; sea water influence |

TABLE 5 Continued...

Well #1 & Well #2 Sampled 6/21/19 Unless Otherwise Noted

| | | | | | | | |
|--|-------|---|-----|---------------|----|------|---|
| Iron* (Treated Water) | ppb | Y | 450 | ND | NA | 300 | Leaching from natural deposits; industrial wastes |
| Manganese* (Treated Water Sampled 10/12/19) | ppb | N | ND | ND | NA | 50 | Leaching from natural deposits |
| Turbidity* (Treated Water Sampled 10/25/19) | NTU | N | 1.7 | ND | NA | 5 | Soil runoff |
| Odor – Threshold | Units | N | 2 | ND - 4 | NA | 3 | Naturally-occurring organic compounds |
| Sulfate | ppm | N | 2.4 | 1.2 – 3.7 | NA | 500 | Runoff/leaching from natural deposits; industrial wastes |
| Total Dissolved Solids | ppm | N | 220 | 150 – 290 | NA | 1000 | Runoff/leaching from natural deposits |
| Zinc | ppb | N | 680 | 260 - 1100 | NA | 5000 | Runoff/leaching from natural deposits; industrial wastes |

Additional information regarding violations:

***Iron, Manganese & Color MCL violation** – Iron, manganese, color, and turbidity are found at levels that exceed the secondary MCL in the raw well water before treatment. IRON, MANGANESE, COLOR and TURBIDITY in the wells are reduced to acceptable levels by the treatment process as shown on the table above. These MCL’s were set to protect you against unpleasant aesthetic effects such as color, taste, odor and the staining of plumbing fixtures (e.g., tubs and sinks), and clothing while washing. The high iron & manganese levels in our wells are due to leaching of natural deposits. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

TABLE 6 - Sampling Results Showing Treatment Of Surface Water Sources

| | |
|--|---|
| <i>Treatment Technique</i> ^(a) (Type of approved filtration technology used) | Rosedale Filtration System / Chlorination |
| Turbidity Performance Standards ^(b) (that must be met through the water treatment process) | <u>Turbidity of the filtered water must:</u> 1 – Be less than or equal to 0.2 NTU in 95% of measurements in a month. 2 – Not exceed 1.0 NTU at any time. |
| Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1. | 100% |
| Highest single turbidity measurement (filtered) during the year | 0.20 NTU on December 18, 2019 |
| Number of violations of any surface water treatment requirements | 0 |

(a) A required process intended to reduce the level of a contaminant in drinking water.

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

Report prepared 5/10/2020 by Alpha Analytical Laboratories, Inc., using *CCR Guidance for Water Suppliers* available at, http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/CCR.shtml, employing due diligence with instructions given. Data contained in this report are based on the analytical results generated by Alpha Analytical Laboratories and its subcontract laboratories.