2022 Consumer Confidence Report

Water System Information

Water System Name: Mission Hills Community Services District

Report Date: 6/23/2023

Type of Water Source(s) in Use: Groundwater Wells

Name and General Location of Source(s): Our drinking water wells are located near 1550 Burton Mesa Boulevard, where water is drawn from the Lompoc Uplands Aquifer.

Drinking Water Source Assessment Information: MHCSD conducted the drinking water source assessment of Well 5 in 2002 and Wells 6 and 7 in 2009. The wells were found to be most susceptible to possible contamination from utility station maintenance areas, drinking water treatment plants, high density housing, historic gas stations, wastewater treatment plants, lagoons/liquid wastes, parks, water supply wells, sewer collection systems, contractor or government agency equipment storage yards, and storm drain discharge points. The most recent Sanitary Survey was completed in 2022. Complete copies of the Source Assessment and Sanitary Survey Report are available from the State Water Resource Control Board (SWRCB) Division of Drinking Water's Santa Barbara Office located at 1180 Eugenia Place, Suite 200, Carpinteria, CA, 93013 or by calling (805) 566-1326.

Time and Place of Regularly Scheduled Board Meetings for Public Participation: Mission Hills CSD Board Meetings are held on the third Wednesday of each month at 4:30PM at our District Office located at 1550 East Burton Mesa Boulevard, Lompoc, CA 93436-2100. All interested members of our community are encouraged to attend and participate.

For More Information, Contact: Mission Hills Community Services District, (805) 733-4366

About This Report

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, 2022 and may include earlier monitoring data.

Terms Used in This Report

Term	Definition
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 <i>E. coli</i> MCL violation has occurred and/or why total coliform bacteria 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 (U.S. EPA).

Term	Definition
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.
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.
Regulatory Action Level (AL)	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
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.
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.
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)

Sources of Drinking Water and Contaminants that May Be Present in Source Water

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.

Regulation of Drinking Water and Bottled Water Quality

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.

About Your Drinking Water Quality

Drinking Water Contaminants Detected

Tables 1, 2, 3, 4, and 5 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 Lead and Copper

Complete if lead or copper is detected in the last sample set.

Lead and Copper	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)	7/7/22 to 8/4/22	40	ND	0	15	0.2	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper* (ppm)	7/7/22 to 8/4/22	40	1.1	0	1.3	0.3	Not applicable	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Table 2. 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)	11/10/21	71.6	62-90	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	11/10/21	283	240-320	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

Table 3. 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 (ppb)	11/10/21	1.3	ND - 3.9	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes.
Barium (ppm)	11/10/21	0.038	ND061	1	2	Discharges of oil drilling wastes and from metal refineries; erosions of natural deposits
Chromium (ppb)	11/10/21	3.3	ND 5.3	50	(100)	Discharge from steel and pulp mills and chrome plating; erosion from natural deposits
Fluoride (ppm)	11/10/21	0.20	0.2 – 0.21	2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2019/ 2022	1.36	ND - 4.08	15	(0)	Erosion Natural Deposits
Nickle (ppb)	11/10/21	3.03	2.0 – 5.1	100	12	Erosion of natural deposits; discharge of metal factories
Nitrate (ppm)	2022 Various	1.6	0.62 -2.2	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium (ppb)	11/10/21	9.3	6.8 -13.0	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)

Table 4. 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
Chloride (ppm)	11/10/21	126.6	110 - 160	500	N/A	Runoff/leaching from natural deposits; seawater influence

Corrosivity (AI-Aggressive Index)	11/10/21	11.6	11.3 – 11.9	N/A	N/A	Natural or industrially influenced balance of Hydrogen, Carbon, and Oxygen in the water, affected by temperature and other factors Water with AI between 10-11.9 is moderately aggressive
Iron (ppb) after filtration	2021 (Various)	ND	ND	300	N/A	Leaching from natural deposits; industrial wastes
Manganese (ppb) after filtration	2021 (Various)	ND	ND	50	N/A	Leaching from natural deposits
Specific Conductance (micromhos)	11/10/21	903	770 – 1,100	1,600	N/A	Substances that form ions when in water; seawater influence
Sulfate (ppm)	4/11/23	93	53 - 130	500	N/A	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	11/10/21	576	480 - 700	1,000	N/A	Runoff/leaching from natural deposits
Turbidity (NTU)	11/10/22	0.7	ND – 2.1	• 5	N/A	Soil runoff
Zinc (ppm)	11/10/21	0.005	ND - 0.017	5	N/A	Runoff/leaching from natural deposits; industrial wastes

Table 5. Detection of Unregulated Contaminants

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects
Boron (ppm)	4/11/22 10/3/22	0.18	0.1-0.3	1	Boron exposures resulted in decreased fetal weight (developmental effects) in newborn rats.
Orthophosphate (ppm)	2022 Various	1.51	1.0 – 1.9	N/A	N/A

Disinfection Byproducts, Residuals and Byproduct precursors	Sample Date	Level Detected	MCL	Health Effects
Total Trihalomethanes (TTHMs) (ppb)	8/16/22	10.2	80	Byproduct of drinking water chlorination
Halo acetic acids (HAA5s) (ppb)	8/16/22	1.9	60	Byproduct of drinking water chlorination
Free Chlorine Residual (ppm)	2 per week	1.22 (2022 Avg.)	MRDL 4.0 (as CL ₂)	Drinking water disinfectant added for treatment

Information for your water softener: Hardness = 16.5gpg and Iron = <100ppb

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