2022 Consumer Confidence Report
Martin Marietta Irwindale Quarry
13550 Live Oak Avenue
Irwindale, California
Water System No. CA1900018

Martin Marietta is pleased to submit this annual consumer confidence (or water quality) report for 2022. This report is designed to inform you about the quality of your drinking water. We test the drinking water quality for many constituents as required by state and federal regulations. This report presents the results of our monitoring for the period of January 1 – December 31, 2022 and may include earlier monitoring data. 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.

As shown in the attached tables, the suspect constituents for water samples collected at the Martin Marietta site in 2022 were below their respective drinking water maximum contaminant levels (MCLs), where applicable. Although bottled water is provided at the site for drinking purposes, the water system is still sampled and tested as required by California State Water Resources Control Board (State Water Board) guidelines.

If you have any questions regarding this Annual Consumer Confidence Report, please contact Mr. Brandon Saeteurn at (626) 856-6721.

Este informe contiene información muy importante sobre el agua para beber. Favor de comunicarse con Martin Marietta a (626) 856-6721 para asistirlo en español.

Source of Water Supply

Water delivered to the Martin Marietta water system comes from the following on-site sources:

- 1900018-002 (Well No. 409)
- 1900018-003 (Well No. 410)

These two groundwater wells are located approximately 1,500 feet south-southeast of the site administrative office building.

Water is a Valuable Natural Resource

Definitions or 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 (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.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the public health goals (PHGs), or maximum contaminant level goals (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 United States Environmental Protection Agency (US EPA).

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 (Cal EPA).

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: State Water Resources Control Board permissions 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 picograms 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 can result from urban storm water 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 Water 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.

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 US EPA's Safe Drinking Water Hotline at (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 at (800) 426-4791.

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. Martin Marietta 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 (800) 426-4791 or at http://www.epa.gov/lead.

For additional drinking water information, one can access the United States Environmental Protection Agency Drinking Water website: https://www.epa.gov/ground-water-and-drinking-water

Tables 1, 2, 3, 4, 5 and 6 include 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 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 data, though representative of the water quality, are more than one year old. Any violation of an AL, MCL, MRDL, or TT is asterisked (or footnoted). Additional information regarding any violation is provided below.

Summary Information for Violation of a MCL, MRDL, AL, TT or Monitoring and Reporting Requirement

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
No violations occurred during the 2022 calendar year.				

Prepared by WSP USA Environment & Infrastructure Inc. (June 2023)

2022 WATER QUALITY TABLE – MARTIN MARIETTA RESULTS

TABLE 1 - SAMPLING RESULTS FOR COLIFORM BACTERIA

MICROBIOLOGICAL CONTAMINANTS	UNIT	MCL	PHG (MCLG)	LEVEL DETECTED	RANGE OF DETECTION	DATE SAMPLED	TYPICAL ORIGINS
Total Coliform Bacteria	MPN/100 mL	More than one positive monthly sample	(0)				Naturally present in the environment
E. coli		0	(0)				Human and animal fecal waste
No. of Routine Distribution System Samples Collected		12		Absent[a]	Absent[a]	Jan - Dec 2022	
No. of Routine Distribution System Samples Positive		0					
No. of Repeat Distribution System Samples Collected		0					
No. of Repeat Distribution System Samples Positive		0					

TABLE 2 - SAMPLING RESULTS FOR LEAD AND COPPER

PARAMETER	UNIT	AL	PHG	NO. OF SAMPLES COLLECTED	RANGE OF DETECTIONS	90th PERCENTILE LEVEL DETECTED[b]	DATE SAMPLED	TYPICAL ORIGINS
Lead	µg/L	15	0.2	5	0.53–2.6	2.3	Aug 2021	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper	mg/L	1.3	0.3	5	0.041–0.180	0.130	Aug 2021	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Note: the water system does not provide water to schools; therefore, the number of schools that have requested lead sampling is not applicable.

TABLE 3 - SAMPLING RESULTS FOR SODIUM AND HARDNESS							
PARAMETER	**UNIT**	**MCL**	**PHG (MCLG)**	**LEVEL DETECTED OR AVERAGE**	**RANGE OF DETECTIONS**	**DATE SAMPLED**	**TYPICAL ORIGINS**
Sodium	mg/L	No Standard	No Standard	22.3	22.1-22.4	Feb/Aug 2015	Salt present in the water and is generally naturally occurring
Hardness	mg/L	No Standard	No Standard	218	208-237	May/Nov 2022	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							
PARAMETER	**UNIT**	**MCL**	**PHG (MCLG)**	**LEVEL DETECTED OR AVERAGE**	**RANGE OF DETECTIONS**	**DATE SAMPLED**	**TYPICAL ORIGINS**
Uranium	pCi/L	20	0.43	1.7	1.6-1.8	Feb/Nov 2020	Erosion of natural deposits
Arsenic	µg/L	10	0.004	1.9	—	Feb 2022	Erosion of natural deposits; runoff from orchards
Barium	mg/L	1	2	0.170	—	Feb 2022	Erosion of natural deposits; industrial discharges
Chlorine (Total Residual)	mg/L	[4.0][c]	[4][d]	0.70	<0.1-1.99	Jan-Apr 2016	By-product of drinking water disinfection
Chromium	µg/L	50	(100)	0.75	0.63-0.876J	Feb/May/Nov 2022	Erosion of natural deposits; industrial discharges
Fluoride	mg/L	2.0	1	0.25	—	Feb 2022	Erosion of natural deposits; industrial discharges; water additive
Nitrate (as N)	mg/L	10	10	2.0	1.5-2.5	Feb/Nov 2022	Erosion of natural deposits; leaching from fertilizer use/septic tanks
Nickel	µg/L	100	12	0.83	0.228J-<2.0	Feb/May/Nov 2022	Erosion of natural deposits; industrial discharges
Selenium	µg/L	50	30	0.68	—	Feb 2022	Erosion of natural deposits; industrial discharges
Total Trihalomethanes	µg/L	80	N/A	30	—	Aug 2022	By-product of drinking water disinfection
Haloacetic Acids	µg/L	60	N/A	13	—	Aug 2022	By-product of drinking water disinfection

TABLE 5 - SAMPLING RESULTS FOR CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD						
PARAMETER	**UNIT**	**MCL**	**LEVEL DETECTED OR AVERAGE**	**RANGE OF DETECTIONS**	**DATE SAMPLED**	**TYPICAL ORIGINS**
Chloride	mg/L	500	22.5	22-23	May/Nov 2022	Runoff/leaching from natural deposits; seawater influence
Iron	µg/L	300	72.5	<9.94-135	May/Nov 2022	Leaching from natural deposits; industrial wastes
Manganese	µg/L	50	<1.0	—	Nov 2022	Leaching from natural deposits
Specific Conductance	µS/cm	1,600	460	447-472	May/Nov 2022	Substances that form ions when in water; seawater influence
Sulfate	mg/L	500	23.5	22-25	May/Nov 2022	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids	mg/L	1,000	276	245-307	May/Nov 2022	Runoff/leaching from natural deposits

TABLE 6 - SAMPLING RESULTS FOR UNREGULATED CONSTITUENTS							
PARAMETER	**UNIT**	**NOTIFICATION LEVEL**	**RESPONSE LEVEL**	**LEVEL DECTECTED OR AVERAGE**	**RANGE OF DECTECTIONS**	**DATE SAMPLED**	**HEALTH EFFECTS LANGUAGE**
Boron	mg/L	1	NA	0.0783	0.0525-0.1040	May/Nov 2022	Boron exposures resulted in decreased fetal weight (developmental effects) in newborn rats.
Hexavalent Chromium	µg/L	0.02[e]	NA	0.61	0.58-0.63	May/Nov 2017	Some people who drink water containing hexavalent chromium in excess of the MCL over many years may have an increased risk of getting cancer.
Perfluorobutane Sulfonic Acid (PFBS)	ng/L	500	5,000	6.3	4.5-9.6	Mar/Jun/Sep/Dec 2022	Perfluorobutane sulfonic acid exposures resulted in decreased thyroid hormone in pregnant female mice.
Perfluorooctanoic Acid (PFOA)	ng/L	5.1	10	4.2	2.5-**6.3**[f]	Mar/Jun/Sep/Dec 2022	Perfluorooctanoic acid exposures resulted in increased liver weight and cancer in laboratory animals.
Perfluorooctanesulfonic Acid [PFOS]	ng/L	6.5	40	2.2	1.7-2.6	Mar/Jun/Sep/Dec 2022	Perfluorooctanesulfonic acid exposures resulted in immune suppression and cancer in laboratory animals.
Perfluorohexane Sulfonic Acid [PFHxS]	ng/L	3	20	**13.8**	**8.9-22**[g]	Mar/Jun/Sep/Dec 2022	Perfluorohexane sulfonic acid exposures resulted in decreased total thyroid hormone in male rats.

Prepared By: MF 03/10/2023 (Rev 06/15/2023)
Checked By: RL 05/16/2023 (Rev 06/16/2023)

Acronyms/Abbreviations

MPN/100 mL = most probable number per 100 mL
mg/L = milligrams per liter (parts per million)
µg/L = micrograms per liter (parts per billion)
ng/L = nanograms per liter (parts per trillion)
pCi/L = picoCuries per liter
AL = Action Level
N/A = not applicable
PHG = Public Health Goal
MCL = Maximum Contaminant Level
MCLG = Maximum Contaminant Level Goal
J = Concentration is between respective laboratory method detection limit and reporting (practical quantitation) limit.
µS/cm = microSiemens per centimeter = µmhos/cm (µmhos/cm = micromhos per centimeter)

Notes

Data in tables above are from Well No. 409, Well No. 410, and/or a distribution system sampling point.
When you read about water quality, you might ask yourself:

- *How much is one part per million (1ppm)?*
  - **Answer:** 1 ppm is equal to 1 drop of water in 14 gallons, 1 second in 12 days, 1 inch in 16 miles or 1 cent in $10,000
- *How much is one part per billion (1ppb)?*
  - **Answer:** 1 ppb is equal to 1 drop of water in 14,000 gallons, 1 second in 32 years, 1 inch in 16,000 miles or 1 cent in $10 million.

Footnotes

[a] Absent (Standard Methods for the Examination of Water and Wastewater [SM 9223: Enzyme Substrate Test] used for Present/Absent determination)

[b] 90th percentile level based on results from five sample locations

[c] EPA Maximum Residual Disinfectant Level (MRDL)

[d] Maximum Residual Disinfectant Level Goal (MRDLG)

[e] 0.02 µg/L is the PHG, not a notification level. No MCL exists for hexavalent chromium because the previous MCL of 10 µg/L was withdrawn in September 2017. In California, hexavalent chromium is currently regulated under the total chromium MCL of 50 µg/L.

[f] The PFOA concentrations in samples collected from Well 409 in March and September 2022 slightly exceeded the respective notification level (NL) but were below the respective response level (RL). NLs are health-based advisory levels for which an MCL value has not yet been established for a particular drinking water constituent. RLs are concentrations that, if exceeded, it is recommended a water system take the source out of service or provide treatment options for the constituent of concern.

[g] The PFHxS concentrations in samples collected from both Wells 409 and 410 in 2022 exceeded the respective notification level (NL) but, except for the Well 409 collected in September 2022, were below the respective response level (RL). The PFHxS NL and RL values were not adopted and approved by the State Water Board until October 31, 2022. Thus, the September 2022 RL exceedance for Well 409 occurred prior to the value being officially adopted and recognized. As stated in footnote f above, NLs are health-based advisory levels for which an MCL value has not yet been established for a particular drinking water constituent. RLs are concentrations that, if exceeded, it is recommended a water system take the source out of service or provide treatment options for the constituent of concern.