2019 Consumer Confidence Report
Hanson Aggregates Irwindale Quarry
13550 Live Oak Avenue
Irwindale, California
Water System No. CA1900018

Hanson Aggregates is pleased to submit this annual consumer confidence (or water quality) report for 2019. 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, 2019 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 Hanson Aggregates site in 2019 were below their respective drinking water maximum contaminant levels (MCLs), where applicable, except for haloacetic acids (HAA5). A discussion related to the HAA5 results is presented on Page 6 of this report. 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 informacion muy importante sobre su agua para beber. Favor de comunicarse Hanson Aggregates a (626) 856-6721 para asistirlo en español.

Source of Water Supply

Water delivered to the Hanson Aggregates 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

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).

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).

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.

Variances and Exemptions: State Water 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 picograms per liter (pg/L).

pCi/L: picocuries per liter (a measure of radiation).

Drinking Water Contaminants

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.

In order to ensure that tap water is safe to drink, the US EPA and the State Water Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Water Board regulations 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. Hanson Aggregates 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 (800) 426-4791 or at http://www.epa.gov/lead.

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. Additional information regarding any violation is provided below.

Summary Information for Contaminants Exceeding an MCL, MRDL, AL or Violation of Any TT or Monitoring and Reporting Requirements

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
Haloacetic Acids (HAA5)	The treated water sample collected on August 26, 2019 contained a HAA5 concentration of 280 µg/L. The HAA5 MCL value is 60 µg/L. The elevated HAA5 value was caused by a problem with the treatment system flow sensor switch that caused the water in the distribution system to be "overtreated".	31 days	Upon receiving the analytical laboratory result, the treatment system was inspected and repaired on approximately September 17, 2019. A confirmation sample was collected on September 26, 2019. The HAA5 result was <2.0 µg/L.	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

Prepared by Wood Environment & Infrastructure Solutions, Inc. (June 2020)

2019 WATER QUALITY TABLE - HANSON AGGREGATES RESULTS

TABLE 1 - SAMPLING RESULTS FOR MICROBIOLOGICAL CONTAMINANTS

MICROBIOLOGICAL CONTAMINANTS	UNIT	MCL	PHG (MCLG)	LEVEL DETECTED	RANGE OF DETECTION	DATE SAMPLED	TYPICAL ORIGINS
Total Coliform Bacteria	MPN/100 mL	No more than one positive monthly sample	(0)				Naturally present in the environment
E. coli		A routine sample and a repeat sample are total coliform positive, and of these is also fecal coliform or *E. coli* positive					Human and animal fecal waste
No. of Routine Distribution System Samples Collected		12		Absent[a]	Absent[a]	Jan - Dec 2019	
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	0.7–4.1	3.85	Aug 2018	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper	mg/L	1.3	0.3	5	0.016–0.210	0.143	Aug 2018	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 (as CaCo3)	mg/L	No Standard	No Standard	175	170-180	May/Nov 2019	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
Gross Alpha Particle Activity	pCi/L	15	(0)	2.40J	—	Aug 2013	Erosion of natural deposits
Uranium	pCi/L	20	0.43	2.05	—	Aug 2013	Erosion of natural deposits
Arsenic	µg/L	10	0.004	2.2	—	Apr 2019	Erosion of natural deposits; runoff from orchards
Barium	mg/L	1	2	0.110	—	Apr 2019	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)	0.787J	0.470J-<1.0	Apr/May/Nov 2019	Erosion of natural deposits; industrial discharges
Nitrate (as N)	mg/L	10	10	0.96	0.87-1.0	Apr/May/Nov 2019	Erosion of natural deposits; leaching from fertilizer use/septic tanks
Nickel	µg/L	100	12	2.00	0.350J-<5.0	Apr/May/Nov 2019	Erosion of natural deposits; industrial discharges
Total Trihalomethanes	µg/L	80	N/A	18	—	Aug 2019	By-product of drinking water disinfection
Haloacetic Acids	µg/L	60	N/A	**141***	<2.0-**280***	Aug/Sept 2019	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	19	16-22	May/Nov 2019	Runoff/leaching from natural deposits; seawater influence
Iron	µg/L	300	64.1	<9.26-119	May/Nov 2019	Leaching from natural deposits; industrial wastes
Manganese	µg/L	50	**77.5**[e]	<5-**155**[e]	Feb/Aug 2015	Leaching from natural deposits
Specific Conductance	µS/cm	1,600	421.5	420-423	May/Nov 2019	Substances that form ions when in water; seawater influence
Sulfate	mg/L	500	20	19-21	May/Nov 2019	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids	mg/L	1,000	247.5	235-260	May/Nov 2019	Runoff/leaching from natural deposits

TABLE 6 - SAMPLING RESULTS FOR UNREGULATED CONSTITUENTS						
PARAMETER	**UNIT**	**NOTIFICATION LEVEL**	**LEVEL DECTECTED OR AVERAGE**	**RANGE OF DECTECTIONS**	**DATE SAMPLED**	**HEALTH EFFECTS LANGUAGE**
Boron	mg/L	1	0.0546	0.0497J-0.0594	May/Nov 2019	Boron exposures resulted in decreased fetal weight (developmental effects) in newborn rats.
Hexavalent Chromium	µg/L	0.02[f]	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.

Prepared By: MF 05/19/2020
Checked By: RL 05/31/2020

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 is 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] Exceedance was summarized and addressed in the 2015 CCR report. The sample collected in February 2015 contained a manganese concentration of 155 mg/L which is above the manganese secondary MCL of 50 mg/L. However, manganese was not detected in a subsequent sample collected later in the year. The data presented is from the most recent monitoring performed in compliance with the regulations.

[f] 0.02 µg/L is the PHG, not a notification level. No MCL exists for hexavalent chromium as the previous MCL of 10 µg/L was withdrawn in September 2017.

* See "Summary Information for Contaminants Exceeding an MCL, MRDL, AL or Violation of Any TT or Monitoring and Reporting Requirements" table on Page 6.