2022 Consumer Confidence Report

Water System Name: **Kettleman City CSD** Report Date **2022**

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.

Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse Kettleman City CSD a 559-386-5866 para asistirlo en español.

Type of water source(s) in use: Surface Water

Name & general location of source(s): California Aqueduct

Drinking Water Source Assessment information: Aqueduct water is recognized as moderately difficult to treat due to the low to moderate hardness, low alkalinity, rapidly variable temperature and low to moderate turbidity. It has been observed that this water changes noticeably from the normal characteristics and that these changes happen very rapidly and without warning. Temperature changes and pH variations of 7.5 – 9.5 are common. For a short duration turbidity has been known to increase by as much as 300%. This water also experiences periodic algae growth. Reductions to agricultural allocations have greatly reduced flows through the aqueduct, combined with low reservoir levels makes the raw water increasingly difficult to treat.

Time and place of regularly scheduled board meetings for public participation: 3rd Tuesday @ 6pm located at 110 General Petroleum Ave. Kettleman City, CA 93239

For more information, contact: Rosa Maldonado Phone: (559) 386-5866

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.

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.

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
(mg/L): 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)

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	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
E. Coli	0	0	(a)	0	Human and animal fecal waste

(a) Routine and repeat samples are total coniform-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 samples for E-coli.

TABLE 1.A. - COMPLIANCE WITH TOTAL COLIFORM MCL

Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	0	0	1 positive monthly sample (a)	0	Naturally present in the environment
Fecal Coliform and E.coli	0	0	0	None	Human and animal fecal waste

(a) For systems collecting fewer than 40 samples per month: two or more positively monthly samples is a violation of the total coliform MCL. For violation of the total coliform MCL, include potential adverse health effects, and actions taken by water system to address the violation**:** [Enter information]

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**	**90th Percentile Level Detected**	**No. Sites Exceeding AL**	**AL**	**PHG**	**No. of Schools Requesting Lead Sampling**	**Typical Source of Contaminant**
Lead (ppb)	8/2/2021	10	0	0	15	0.2	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (mg/L))	8/2/2021	10	0.094	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 (mg/L)	10/5/2022	64	NA	None	None	Salt present in the water and is generally naturally occurring
Hardness (mg/L)	10/5/2022	100	NA	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**
Radioactive contaminant						
Gross Alpha (pCi/L)	2021	3.89	NA	15	0	Erosion of natural deposits
Radium 228(pCi/L)	2021	0.084	NA	5	NA	Erosion of natural deposits
Uranium (pCi/L)	2020	1.70	1.70	20	0.43	Erosion of natural deposits
Inorganic Contaminants						
Aluminum (mg/L)	10/5/2022	0.53	NA	1	0.6	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic (ug/L)	10/5/2022	4	NA	10	0.004	Erosion of natural deposits; runoff form orchards; glass and electronics production wastes.
Copper (Free) (mg/L)	10/5/2022	0.0077	NA	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Nitrate as N (mg/L)	10/5/2022	0.25	NA	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Nitrite as N (mg/L)	10/5/2022	0.054	NA	1	1	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Disinfection Byproducts, Disinfectant residuals, and Disinfection Byproduct Precursors						
Haloacetic Acids (HAA5) (ug/L)	**2022**	21.66	3.6 - 48	60	N/A	Byproduct of drinking water disinfection
Total Trihalomethanes (ug/L)	**2022**	**94.5**	**44 - 140**	**80**	**N/A**	**Byproduct of drinking water disinfection**

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Aluminum (mg/L)	10/5/2022	0.53	NA	0.2	NA	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (mg/L)	10/5/2022	100	NA	500	N/A	Runoff/leaching from natural deposits; seawater influence.
Color (units)	**10/5/2022**	**25**	**NA**	**15**	**NA**	**Naturally-occurring organic materials**
Copper (Free) (ug/L)	10/5/2022	7.7	NA	1000	NA	Internal corrosion of household plumbing systems; erosion of natural deposits, leaching from wood preservatives
Iron (ug/L)	10/5/2022	87	NA	300	NA	Leaching from natural deposits, industrial wastes
Manganese (ug/L)	**10/5/2022**	**65**	**NA**	**50**	**NA**	**Leaching from natural deposits**
Odor – Threshold (Units)	10/5/2022	1	NA	3	N/A	Naturally- occurring organic materials.
Specific Conductance (EC) (uhmos/cm)	10/5/2022	570	NA	1600	N/A	Substances that form ions when in water; seawater influence.
Sulfate (mg/L)	10/5/2022	36	NA	500	NA	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (TDS) (mg/L))	10/5/2022	330	NA	1000	NA	Runoff/leaching from natural deposits
Turbidity (NTU)	**10/5/2022**	**8.1**	**NA**	**5**	**N/A**	**Soil runoff.**

Table 1. Detection of Unregulated Contaminants

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects
Alkalinity (mg/L)	10/5/2022	85	NA	NA	NA
Calcium (mg/L)	10/5/2022	20	NA	NA	NA
Fluoride (mg/L)	10/5/2022	1.2	NA	NA	NA
Magnesium (mg/L)	10/5/2022	12	NA	NA	NA
pH (units)	10/5/2022	8.2	NA	NA	NA
Potassium (mg/L)	10/5/2022	3.6	NA	NA	NA

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. KETTLEMAN CITY 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 (1-800-426-4791) or at http://www.epa.gov/lead.

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

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT				
Violation	**Explanation**	**Duration**	**Actions Taken to Correct the Violation**	**Health Effects Language**
Total Trihalomethanes (TTHM)	**Byproduct of drinking water disinfection**	**Ongoing**	**Aeration treatment to be installed on storage tanks to reduce TTHM levels.**	**Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.**
Color , Manganese, Turbidity	Aqueduct water is recognized as moderately difficult to treat due to the low to moderate hardness, low alkalinity, rapidly variable temperature and low to moderate turbidity. It has been observed low to moderate hardness, low alkalinity, rapidly variable temperature and low to moderate turbidity. Temperature changes and pH variations of 7.5 – 9.5 are common. For a short duration turbidity has been known to vary			

For Systems Providing Surface Water as a Source of Drinking Water

TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES	
Treatment Technique [(a)] (Type of approved filtration technology used)	Membrane
Turbidity Performance Standards [(b)] (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 – Be less than or equal to __0.1___ NTU in 95% of measurements in a month. 2 – Not exceed __1.0___ NTU for more than eight consecutive hours. 3 – 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 during the year	0.05
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.