Presented By

City of Imperial California

ANNUAL WATER QUALITY REPORT

WATER TESTING PERFORMED IN 2017

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

PWS ID#: 1310006

Quality First

Once again, we are pleased to present our annual water quality report covering the period between January 1 and December 31, 2017. As in years past, we are committed to delivering the best-quality drinking water possible. To that end, we remain vigilant in meeting the challenges of new regulations, source water protection, water conservation, and community outreach and education while continuing to serve the needs of all our water users. Thank you for allowing us the opportunity to serve you and your family.

We encourage you to share your thoughts with us on the information contained in this report. After all, well-informed customers are our best allies. For more information about this report, or for any questions relating to your drinking water, or to voice your concerns about your drinking water, please call **Jackie Loper**, Public Services Director, at (760) 355-3336.

Where Does My Water Come From?

The City of Imperial receives its water supply from the Colorado River via the All American Canal and the facilities of the Imperial Irrigation District. Our treatment process for the surface water consist of "complete" treatment, including sedimentation, coagulation, flocculation, filtration, and disinfection. The City currently provides an average of 2.3 million gallons per day and an average of 860 million gallons of water annually to its citizens. At the present time, the City of Imperial meets all applicable State Water Resources Control Board, Division of Drinking Water, and the U.S. Environmental Protection Agency domestic water quality standards. The raw water we receive from the All American Canal exceeded standards for aluminum and iron. Water quality data for the reporting period ending December 31, 2017, in enclosed. Recent 2017 water quality information is available for review upon request.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) 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 or http://water.epa.gov/drink/hotline.

City Council Meeting

You are invited to participate in our City Council Meetings. We meet the 1st and 3rd Wednesdays of each month beginning at 7 p.m. at the Imperial Council Chambers, 200 West 9th Street, Imperial, CA 92251.

Lead in Home Plumbing

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. We are 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 or at www.epa.gov/lead.

Source Water Assessment

A Source Water Assessment Plan (SWAP) is now available at our office. If you would like to review the Source Water Assessment Plan, please feel free to contact our office during regular office hours.

Substances That Could Be in 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.

To ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) and the State Water Resources Control Board (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. 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 water poses a health risk.

Contaminants that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or can result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming;

Pesticides and Herbicides, which 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, which are by-products of industrial processes and petroleum production, and which can also come from gas stations, urban stormwater runoff, agricultural applications, and septic systems;

Radioactive Contaminants, which can be naturally occurring or can be the result of oil and gas production and mining activities.

More information about contaminants and potential health effects can be obtained by calling the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Definitions

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

µS/cm (microsiemens per centimeter): A unit expressing the amount of electrical conductivity of a solution.

MCL (Maximum Contaminant Level): 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 (SMCLs) are set to protect the odor, taste and appearance of drinking water.

MCLG (Maximum Contaminant Level Goal): 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. EPA.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable

NS: No standard

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

PDWS (Primary Drinking Water Standard): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

PHG (Public Health Goal): 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 EPA.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

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

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule. The information in the data tables shows only those substances that were detected between January 1 and December 31, 2017. Remember that detecting a substance does not necessarily mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels. The State recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

We participated in the 3rd stage of the U.S. EPA's Unregulated Contaminant Monitoring Rule (UCMR3) program by performing additional tests on our drinking water. UCMR3 benefits the environment and public health by providing the EPA with data on the occurrence of contaminants suspected to be in drinking water, to determine if the EPA needs to introduce new regulatory standards to improve drinking water quality. Contact us for more information on this program.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppm)	2017	1	0.6	0.75	0.11–0.59	No	Erosion of natural deposits; residue from some surface water treatment processes
Arsenic	2017	10	0.004	2.5	NA	No	Leaching from natural deposits; Industrial and agricultural wastes.
Barium (ppm)	2017	1	2	0.12	NA	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (ppm)	2017	2.0	1	0.33	NA	No	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha Particle Activity (pCi/L)	2016	15	(0)	13	NA	No	Erosion of natural deposits
Uranium (pCi/L)	2016	20	0.43	3.2	NA	No	Erosion of natural deposits

SUBSTANCE (UNIT OF MEASURE)	MCL	PHG	LEVEL FOUND	RANGE	SAMPLE DATE	VIOLATION	TYPICAL SOURCE
Turbidity	TT=1 NTU TT=95% of samples <0.3 NTU	NA	1.3 NTU 99.5%	NA NA	2017	No	Soil runoff

TTHM/HAA

SUBSTANCE (UNIT OF MEASURE)	MCL	PHG (OR MCLG	AVERAGE	RANGE LOW-HIGH	SAMPLE DATE	VIOLATION	TYPICAL SOURCE
TTHM (ppb)	80	NA	97*	43–140	2017	Yes	Byproduct of drinking water disinfection
HAAS (ppb)	60	NA	26	6.7–29	2017	No	Byproduct of drinking water disinfection

Bacteriological Contaminants in the Distribution System

SUBSTANCE (UNIT OF MEASURE)	SAMPLE DATE	MCL	PHG (MCLG) IN CCR UNITS	AMOUNT DETECTED	NO. OF MONTH OF VIOLATION	TYPICAL SOURCE
Total Coliform	2017	1 positive monthly sample	(0)	Highest no. of positives in any month 0	0	Human or animal fecal waste
E. coli	2017	A routine sample and a repeat sample detect total coliform, and either sample also detects fecal coliform or E. coli	(0)	Total no. of positives in the year 0	0	Human or animal fecal waste

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	PHG (MCLG)	AMOUNT DETECTED (90TH%TILE)	SITES ABOVE AL/TOTAL SITES	NO. OF SCHOOLS REQUESTING LEAD TESTING	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2016	1.3	0.3	0.43	0/30	0	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2016	15	0.2	<0.002	0/30	0	No	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SMCL	PHG (MCLG)	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppb)	2017	200	NS	75	57–110	No	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (ppm)	2017	500	NS	110	NA	No	Runoff/leaching from natural deposits; seawater influence
Color (Units)	2017	15	NS	5.0	NA	No	Naturally occurring organic materials
Iron (ppb)	2017	300	NS	100	NA	No	Leaching from natural deposits; industrial wastes
Odor–Threshold (TON)	2017	3	NS	2	NA	No	Naturally occurring organic materials
Specific Conductance (µS/cm)	2017	1,600	NS	1,100	NA	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2017	500	NS	280	NA	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2017	1,000	NS	650	NA	No	Runoff/leaching from natural deposits
Turbidity (Units)	2017	5	NS	1.3	NA	No	Soil runoff

UNREGULATED AND OTHER SUBSTANCES [2]

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Alkalinity, Total (ppm)	2017	140	NA	Leaching from natural deposits
Bicarbonate (ppm)	2017	170	NA	Leaching from natural deposits
Boron (ppb)	2017	180	NA	Leaching from natural deposits
Calcium (ppm)	2017	77	NA	Leaching from natural deposits
Hardness, Total (ppm)	2017	310	NA	Leaching from natural deposits
Magnesium (ppm)	2017	30	NA	Leaching from natural deposits
pH (Units)	2017	8.3	NA	Leaching from natural deposits
Potassium (ppm)	2017	5.2	NA	Leaching from natural deposits
Sodium (ppm)	2017	110	NA	Leaching from natural deposits
Total Anions (ppm)	2017	11.7	NA	Naturally occurring
Total Cations (ppm)	2017	12.1	NA	Naturally occurring
Vanadium (ppb)	2017	3.0	NA	Leaching from natural deposits

TREATED WATER RESULTS

MONTH	SECONDARD MCL= 200 PPB ALUMINUM (PPB)	SECONDARDY MCL=300 PPB IRON (PPB)
January	130	<50
February	130	<50
March	120	<50
April	120	<50
May	290	<50
June	220	<50
July	250	<50
August	350	<50
September	290	<50
October	130	<50
November	180	<50
December	<50	<50
	RANGE: <50–350 AVERAGE: 188	RANGE: <50 AVERAGE: ND

[1] Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

[2] Unregulated contaminant monitoring helps the U.S. EPA and the State Water Resources Control Board to determine where certain contaminants occur and whether the contaminants need to be regulated.

*MCL Exceedance

VIOLATION OF TTHMs MCL

TTHMs: Site 3 - MCL violation 1st, 2nd, 3rd quarter. Site 8 - MCL violation on the 3rd and 4th quarter

VIOLATION	EXPLANATION	DURATION	ACTIONS TAKEN TO CORRECT THE VIOLATION	HEALTH EFFECTS LANGUAGE
Total Trihalomethanes (TTHMs) Maximum Contaminant Level (MCL) Violation	The 3-quarter average at the TTHM monitoring site exceeded the MCL of 80 ppb.	The violation is for the 3rd quarter of 2017.	We are investigating changes in the operation of the distribution system to reduce TTHM levels to below the MCL.	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.