City of Imperial
420 South Imperial Avenue
Imperial, CA 92251

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

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.

In order 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, 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 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, 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, that 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.

We've Come a Long Way

Once again we are proud to present our annual water quality report covering the period between January 1 and December 31, 2016. In a matter of only a few decades, drinking water has become exponentially safer and more reliable than at any other point in human history. Our exceptional staff continues to work hard every day—at any hour—to deliver the highest quality drinking water without interruption. Although the challenges ahead are many, we feel that by relentlessly investing in customer outreach and education, new treatment technologies, system upgrades, and training, the payoff will be reliable, high-quality tap water delivered to you and your family.

City Council Meeting

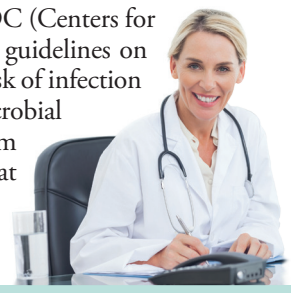
You are invited to participate in our City Council Meetings. We meet the 1st and 3rd Wednesdays of each month beginning at 7 p.m. at the Imperial Public Library, 200 West 9th Street, Imperial, CA 92251.

Source Water Assessment

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

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.



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 consists 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 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, 2016, are enclosed. Recent 2016 water quality information is available for review upon request.

Water Conservation

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

To The Last Drop

The National Oceanic and Atmospheric Administration (NOAA) defines drought as a deficiency in precipitation over an extended period of time, usually a season or more, resulting in a water shortage causing adverse impacts on vegetation, animals, and/or people. Drought strikes in virtually all climate zones, from very wet to very dry.

There are primarily three types of drought: Meteorological Drought refers to the lack of precipitation, or the degree of dryness and the duration of the dry period; Agricultural Drought refers to the agricultural impact of drought, focusing on precipitation shortages, soil water deficits, and reduced ground water or reservoir levels needed for irrigation; and Hydrological Drought, which pertains to drought that usually occurs following periods of extended precipitation shortfalls that can impact water supply (i.e., stream flow, reservoir and lake levels, ground water).

Drought is a temporary aberration from normal climatic conditions, thus it can vary significantly from one region to another. Although normally occurring, human factors, such as water demand, can exacerbate the duration and impact that drought has on a region. By following simple water conservation measures, you can help significantly reduce the lasting effects of extended drought.

To learn more about water conservation efforts, check out U.S. EPA's Water Conservation Tips for Residents at www.epa.gov/region1/eco/drinkwater/water_conservation_residents.html.

Questions?

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.

Test Results

Our water is monitored for many different kinds of contaminants on a very strict sampling schedule. The information below represents only those substances that were detected; 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 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, in order to determine if EPA needs to introduce new regulatory standards to improve drinking water quality.

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	PHG (MCLG) [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Aluminum (ppm)	2016	1	0.6	0.15	NA	No	Erosion of natural deposits; residue from some surface water treatment processes
Barium (ppm)	2016	1	2	0.13	NA	No	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Gross Alpha Particle Activity (pCi/L)	2016	15	(0)	13	NA	No	Erosion of natural deposits
Turbidity (NTU)	2016	TT	NA	0.06	NA	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting the limit)	2016	TT = 95% of samples <0.3 NTU	NA	98%	NA	No	Soil runoff
Uranium (pCi/L)	2016	20	0.43	3.2	NA	No	Erosion of natural deposits

Distribution System

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL	PHG	AVERAGE	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
TTHMs (ppb)	2016	80	NA	93	50–120	Yes	Byproduct of drinking water disinfection
HAAs (ppb)	2016	60	NA	21	8–27	No	Byproduct of drinking water disinfection

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	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2016	1.3	0.3	0.43	0/30	No	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (ppb)	2016	15	0.2	<5	0/30	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)	2016	200	NS	255	150–340	No	Erosion of natural deposits; residual from some surface water treatment processes
Chloride (ppm)	2016	500	NS	110	NA	No	Runoff/leaching from natural deposits; seawater influence
Color (Units)	2016	15	NS	10.0	NA	No	Naturally occurring organic materials
Iron (ppb)	2016	300	NS	250	190–350	No	Leaching from natural deposits; industrial wastes
Odor–Threshold (TON)	2016	3	NS	1	NA	No	Naturally occurring organic materials
Specific Conductance (µS/cm)	2016	1,600	NS	1,100	NA	No	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2016	500	NS	270	NA	No	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids (ppm)	2016	1,000	NS	690	NA	No	Runoff/leaching from natural deposits
Turbidity (Units)	2016	5	NS	7.2	NA	No	Soil runoff

UNREGULATED AND OTHER SUBSTANCES [1]

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Alkalinity, Total (ppm)	2016	150	NA	Leaching from natural deposits
Bicarbonate (ppm)	2016	180	NA	Leaching from natural deposits
Boron (ppb)	2016	180	NA	Leaching from natural deposits
Calcium (ppm)	2016	82	NA	Leaching from natural deposits
Hardness, Total (ppm)	2016	330	NA	Leaching from natural deposits
Magnesium (ppm)	2016	30	NA	Leaching from natural deposits
pH (Units)	2016	8.3	NA	Leaching from natural deposits
Potassium (ppm)	2016	5.3	NA	Leaching from natural deposits
Sodium (ppm)	2016	120	NA	Leaching from natural deposits
Total Anions (ppm)	2016	11.7	NA	Naturally occurring
Total Cations (ppm)	2016	11.9	NA	Naturally occurring
Vanadium (ppb)	2016	3.6	NA	Leaching from natural deposits

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

VIOLATION OF TTHMS MCL

VIOLATION	EXPLANATION	DURATION	ACTIONS TAKEN TO CORRECT THE VIOLATION	HEALTH EFFECTS LANGUAGE
Total Trihalomethanes (TTHMs) Maximum Contaminant Level (MCL) Violation	The 4-quarter average at the TTHM monitoring site exceeded the MCL of 80 ppb.	The violation is for the 3rd and 4th quarters of 2016.	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.

Treated Water Results		
	Secondary MCL = 200 ppb	Secondary MCL = 300 ppb
	Aluminum (ppb)	Iron (ppb)
January	<50	<50
February	<50	<50
March	<10	<50
April	140	<50
May	200	<50
June	240	<50
July	<50	<50
August	<50	<50
September	390	350
October	<50	<50
November	180	<50
December	70	<50
	Range: <10-390 Average: 102	Range: <50 - 350 Average: ND

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

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

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.

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.

Fact or Fiction

A person can live about a month without food, but only about a week without water. *(Fact: Dehydration symptoms generally become noticeable after only 2% of one's normal water volume has been lost.)*

A person should consume a half-gallon of water daily to live healthily. *(Fact: A person should drink at least 64 ounces, or 8 cups, of water each day.)*

Methods for the treatment and filtration of drinking water were developed only recently. *(Fiction: Ancient Egyptians treated water by siphoning water out of the top of huge jars after allowing the muddy water from the Nile River to settle. And, Hippocrates, known as the father of medicine, directed people in Greece to boil and strain water before drinking it.)*

There is the same amount of water on Earth now as there was when the Earth was formed. *(Fact: The water that comes from your faucet could contain molecules that dinosaurs drank!)*

A typical shower with a non-low-flow showerhead uses more water than a bath. *(Fiction: A typical shower uses less water than a bath.)*

About half the water treated by public water systems is used for drinking and cooking. *(Fiction: Actually, the amount used for cooking and drinking is less than 1% of the total water produced!)*

One gallon of gasoline poured into a lake can contaminate approximately 750,000 gallons of water. *(Fact)*