CASTAIC POWER PLANT
DRINKING WATER QUALITY REPORT
2018

The 2018 Water Quality Report for Castaic Power Plant was prepared by the Los Angeles Department of Water and Power (LADWP). The report is required by the State Water Resources Control Board Division of Drinking Water (DDW) and was prepared in accordance with DDW guidelines. The report provides information about drinking water supplied to Castaic Power Plant during the 2018 calendar year (January 1, 2018 to December 31, 2018). The data are compared to the current State and Federal Standards. The tables contained in this report list all of the drinking water contaminants that were detected during the most recent sampling for the constituent.

A water supply permit for Castaic Power Plant was issued in 2016. The Boil Water Advisory for the Castaic Water System has been lifted after the administrative review of the amended operations was completed. All the initial monitoring requirements have been met.

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

WHERE DOES MY WATER COME FROM?

The term "source water" describes where LADWP obtains the water you drink. All drinking water, tap or bottled, comes from either surface water or groundwater sources. Surface water sources include rivers, lakes, streams, ponds, or reservoirs. Groundwater sources are springs or wells.

The Castaic Power Plant receives raw water from the State Water Project (California Aqueduct) via Pyramid Lake and the Elderberry Forebay. The California Aqueduct is operated by the California Department of Water Resources. The water served at Castaic is treated with polymer and ferric chloride for coagulation, sodium bicarbonate for pH stabilization. Treatment for color and disinfection by-products (DBP) removal was added in 2017. Treated water is then filtered and chlorinated prior to being available for consumption. All monitoring and analyses of source and treated water are conducted by LADWP personnel.

WHY IS DRINKING WATER MONITORED AND TREATED?

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 human activity.

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

In order to ensure that tap water is safe to drink, the USEPA and the DDW prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DDW regulations also establish limits for contaminants in bottled water that must provide the same protection for public heath. Contaminants that may be present in source waters 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 result from urban storm run-off, 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 storm water run-off, and residential uses.

Organic chemicals, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can, also, come from gas stations, urban storm water run-off, and septic systems.

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

SPECIAL NOTICE TO IMMUNO-COMPROMISED CONSUMERS

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. USEPA/Center 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 (800) 426-4791.

MONITORING OF REGULATED CONTAMINANTS /CONSTITUENTS

There are over 110 constituents and contaminants required for monitoring. Utilities monitor for each contaminant at varying frequencies based on the type of contaminant and the type of source water.

TERMS USED IN THIS REPORT

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

DLR (Detection Limit for Reporting Purposes): The DLR is the lowest level at which all DDW certified laboratories can accurately and reliably detect a compound. The DLR provides a standardized basis for reporting purposes.

MCL (Maximum Contaminant Level): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the PHGs and MCLGs (see below) as economically or technologically feasible. For certain contaminants, compliance with the MCL is based on the average of all samples taken throughout the year.

MCLG (Maximum Contaminant Level Goal) - Federal: 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.

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.

NL (Notification Levels) - State: Health-based advisory levels established by DDW for chemicals in drinking water that lack maximum contaminant levels (MCLs). When chemicals are found at concentrations greater than their notification levels, certain requirements and recommendations apply.

PHG (Public Health Goal) - State: 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.

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

SDWS (Secondary Drinking Water Standards): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWS do not affect the health at the MCL levels.

TT (Treatment Technique): A required treatment process, which will reduce the level of a contaminant in drinking water.

MONITORING OF UNREGULATED CONSTITUENTS

There are contaminants/constituents found in drinking water that are not yet regulated. Some of these "unregulated contaminants/constituents" are monitored because they could be candidates for future regulations or are of interest to our consumers.

NOTICE REGARDING LEAD IN DRINKING WATER

Castaic Power Plant distribution system was sampled for lead in 2018. Samples were collected after water stayed in the pipes for at least 6 hours in order to obtain values representing a stagnation period. All sample results were below the federal action level of 15 µg/L. Results ranged from non-detect to 2.6 µg/L. (One µg/L is roughly equal to one pinch of salt in one ton of potato chips.) 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 lead service lines and home plumbing. LADWP is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When water has been in your pipes 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 at (800) 426-4791 or at https://www.epa.gov/lead.

In 2019 we will again be asking you for your assistance in the residential tap water sampling, as required by the Lead and Copper Rule (LCR).

WATER QUALITY UPDATE

Castaic Power Plant Domestic Water Treatment System is actively maintained and is continually undergoing system improvements to provide drinking water of high quality to the population of DWP employees it serves. Treatment system modifications include chemical pump replacements and the reconfiguration of the filter trains to include removal of disinfection by-product (DBPs) precursors from drinking water. These modifications were completed in 2017 and allowed for a substantial increase in water storage while decreasing the potential for DBP formation in the storage tank.

The Castaic Power Plant Domestic Water Treatment System is permitted, but was under a boil water advisory for some period of time. During this time, bottled water was provided for all its workers. However, the Boil Water Advisory was lifted on May 28, 2019 after the administrative review of the amended operations plan was completed and all initial monitoring requirements were satisfied.

CASTAIC POWER PLANT – 2018 CALENDAR YEAR

Health-based Primary Drinking Water Constituents detected in Treated Water

Contaminants /Constituents	Units	Castaic Power Plant Water Quality		State Primary Standard (MCL) [MRDL]	MEETS PRIMARY STANDARD?	State PHG (Fed. MCLG) [MRDLG]	Major Sources in Drinking water
		Range	Average				
Fluoride	mg/L	0.12	0.12	2	**YES**	1	Erosion of natural deposits
Nitrate (as N)	mg/L	0.45	0.45	10	**YES**	10	Runoff and leaching from fertilizer use; erosion of natural deposits
Distribution System							
Copper (at-the-tap)	µg/L	number of samples exceeding AL = 0 out of 5	90^{th} Percentile value = 73	AL=1300	**YES**	300	Internal corrosion of interior water plumbing systems; data are from samples taken in 2015
Lead (at-the-tap)	µg/L	number of samples exceeding AL = 0 out of 5	90^{th} Percentile value = 2	AL=15	**YES**	0.2	Internal corrosion of interior water plumbing systems; data are from samples taken in 2015
Chlorine Residual, Total (as Cl_2)	mg/L	0.80 - 1.59	1.1	[4]	**YES**	[4]	Disinfectant
Haloacetic Acids [HAA5]	µg/L	1.71 – 13.11	7.33	60	**YES**	none	Disinfection by-product
Trihalomethanes, Total [TTHM]	µg/L	6.03 – 43.49	22.54	80	**YES**	none	Disinfection by-product

Abbreviations for tables

TON	Threshold Odor Number	NTU	Nephelometric Turbidity Units. Turbidity is a measure of cloudiness of the water; We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.
ACU	Apparent Color Unit	mg/L	milligrams per Liter (equivalent to parts per million)
AL	Action Level	µg/L	micrograms per Liter (equivalent to parts per billion)
ND	Not detected	µS/cm	micro Siemens per centimeter

CASTAIC POWER PLANT – 2018 CALENDAR YEAR

Aesthetic-based Secondary Drinking Water Constituents detected in Treated Water

Contaminants /Constituents	Units	Castaic Power Plant Water Quality	Federal & State Secondary Standard (SMCL)	Meet Secondary Standard?	Major Source in Drinking Water
		Level Detected			
Chloride	mg/L	62	500	**YES**	Runoff/leaching from natural deposits
Color	ACU	3	15	**YES**	Naturally-occurring organic materials
Copper	µg/L	14	1000	**YES**	Internal corrosion of household plumbing systems; treatment for algal control
pH, field	Units	7.35	6.5 - 8.5	**YES**	Substances that form ions when in water
Specific Conductance	µS/cm	474	1600	**YES**	Substances that form ions when in water
Sulfate	mg/L	43.3	500	**YES**	Runoff/leaching from natural deposits
Total Dissolved Solids [TDS]	mg/L	263	1000	**YES**	Runoff/leaching from natural deposits

CASTAIC POWER PLANT – 2018 CALENDAR YEAR

Unregulated Drinking Water Constituents detected in Treated Water

Contaminants /Constituents	Units	Castaic Power Plant Water Quality		
		Level Detected	Notification Level	Major Source in Drinking Water
Alkalinity	mg/L	85.6		Natural constituent
Boron	µg/L	183	1000	Erosion of natural deposits
Calcium	mg/L	26.1		Natural constituent
Magnesium	mg/L	9.70		Natural constituent
Potassium	mg/L	2.52		Natural constituent
Sodium	mg/L	50.4		Natural constituent
Total Organic Carbon [TOC]	mg/L	0.472		Natural constituent
Total Hardness [as Ca CO3]	mg/L	105		Natural constituent

For more information regarding this report, please call Michael Mercado at (213) 367-0395