CONTROL GORGE POWER PLANT

2013 WATER QUALITY REPORT

The 2013 Water Quality Report for Control Gorge Power Plant system was prepared by the Los Angeles Department of Water and Power (LADWP). The report gives information about drinking water at the Control Gorge Power Plant during the 2013 calendar year. The data are compared to the current State and Federal Standards. Only those constituents that were detected are listed. The report is required by the California Department of Public Health (CDPH) and was prepared in accordance with CDPH guidelines.

THE BOTTOM LINE

The water provided to the Control Gorge Power Plant system meets all state and federal drinking water requirements. Only the following substances with primary standards were detected at low levels in the water supplied to Control Gorge system: arsenic, chlorine, fluoride, and radionuclides (alpha, beta, and uranium). The levels of these substances were far below the established maximum contaminant levels (MCLs), which are the health protective standards set by the United States Environmental Protection Agency (U. S. EPA) and CDPH.

For more information on these contaminants, please refer to the Table 1 "Primary Drinking Water Constituents Found in the Water". The data for Lead and Copper on this table are the results of residential tap monitoring conducted in 2013 as required by the Lead and Copper Rule (LCR).

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.

Control Gorge Power Plant receives natural spring water. The domestic water supply comes exclusively from Bircham Canyon Spring, an artesian well located along Bircham Canyon Road near the plant. It is disinfected with chlorine to ensure bacterial quality of the water. It receives filtration treatment to remove turbidity and arsenic.

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 from the Safe Drinking Water Hotline (800 426-4791).

In order to ensure that tap water is safe to drink, the USEPA and the CDPH prescribe regulations that limit the amount of certain contaminants in water provided by public water system. CDPH regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. 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 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 risks 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).

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 CDPH 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): 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 level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

MRDLG (Maximum Residual Disinfectant Level Goal): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLs are set by the U.S. Environmental Protection Agency.

NL (Notification Levels) - State: Health-based advisory levels established by CDPH 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.

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

Secondary Drinking Water Standards: These standards are based on aesthetic qualities such as taste, odor, and appearance, which affect customer acceptance. They are not considered a health risk if exceeded.

TT (Treatment Technique): A required treatment process, which will reduce the level of a contaminant in drinking water. For example, the filtration process is a treatment technique used to reduce turbidity (the cloudiness of water) and microbial contaminants from water. High turbidities may be indicative of poor or inadequate filtration.

MONITORING OF REGULATED CONSTITUENTS

There are over 110 regulated constituents (or contaminants). Utilities monitor for each constituent at varying frequencies based on the type of constituent and the type of source water. For example, groundwater sources are generally sampled once every three years. Those constituents that pose acute risk require more frequent monitoring. Nitrate sampling is required annually, and bacteriological sampling is required monthly. Since most constituents are not detected in our water, only those constituents that are detected are listed in the tables.

Arsenic

The current EPA standard for arsenic in drinking water is 10 ppb. The California Office of Environmental Health Hazard Assessment adopted a Public Health Goal of 0.004 ppb in April 2004. In November 2008, CDPH adopted the EPA arsenic standard as the new State drinking water standard for arsenic. Arsenic compliance is based on a running annual average. In 2013 the average amount of arsenic was 5.1 ppb.

Lead in Drinking Water

Elevated levels of lead can cause serious health problems, especially for pregnant women and young children. The Lead in your drinking water is primarily from materials and components associated with service lines and home plumbing. The control Gorge Power Plant 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/safewater/lead.

Turbidity

Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system. Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites such as Cryptosporidium and Giardia that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Unregulated Constituents

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

For more information regarding this report, please call Mr. Michael Mercado of the Water Quality Division at (213) 367-0395.

CONTROL GORGE POWER PLANT – 2012 CALENDAR YEAR

TABLE 1 – Health-Based Primary Drinking Water Contaminants Detected

Constituents/ Contaminants	Units	Control Gorge Water Quality		State Primary Std (MCL) or [MRDL]	MEETS PRIMARY STD?	State PHG or Federal [MRDLG] or (MCLG)	Major Source in Drinking Water
		Range	Average				
Alpha Emitters[a]	pCi/L	7.1	7.1	15	**YES**	(0)	Erosion of natural deposits
Arsenic	µg/L	<1.9-24.2	5.1	10	**YES**	0.004	Natural hot springs; erosion of natural deposits
Beta Emitters[a]	pCi/L	4.3	4.3	50	**YES**	(0)	Decay of natural deposits
Copper (at-the-tap)[b]	µg/L	Number of samples exceeding AL = 0 in 5	90th Percentile value =187 ppb	AL=1300	**YES**	300	Internal corrosion of household water plumbing systems
Fluoride	mg/L	0.78	0.78	2	**YES**	1	Erosion of natural deposits
Lead (at-the-tap)[b]	µg/L	Number of samples exceeding AL = 0 in 5	90th Percentile value = 8.1	AL=15	**YES**	0.2	Internal corrosion of household water plumbing systems
Nitrate (NO_3)	mg/L	1.6	1.6	45	**YES**	2	Erosion of natural deposits; run-off and leaching from fertilizer use
Turbidity[c]	NTU	0.18-0.52	0.34	TT	**YES**	TT	Soil runoff
Uranium[a]	pCi/L	8.2	8.2	20	**YES**	1	Erosion of natural deposits

TABLE 2 - Aesthetic-Based Secondary Drinking Water Contaminants Detected

Constituents/ Contaminants	Units	Control Gorge Water Quality		Secondary MCL	MEETS SECONDARY STANDARD?	Major Source in Drinking Water
		Range	Average			
Chloride	mg/L	30.1	30.1	500	**YES**	Runoff/leaching from natural deposits
Color	Units	3-8	4.3	15	**YES**	Naturally-occurring organic materials
Conductivity	µS/cm	354-393	344	1600	**YES**	Natural constituents
Iron	mg/L	<100-178	61.6	300	**YES**	Leaching from natural deposits
Odor	Units	1-4	2.1	3	**YES**	Naturally-occurring organic materials
pH	Units	7.2-8.1	7.6	6.5 - 8.5	**YES**	Natural constituents
Sulfate	mg/L	16.3	16.3	500	**YES**	Runoff/leaching from natural deposits
Total Dissolved Solids (TDS)	mg/L	240	240	1000	**YES**	Runoff/leaching from natural deposits
Zinc	mg/L	0.010.03	0.026	5	**YES**	Runoff/leaching from natural deposits

CONTROL GORGE POWER PLANT – 2012 CALENDAR YEAR

TABLE 3 - Unregulated Drinking Water Constituents Detected

Constituents / Contaminants	Units	Control Gorge Water Quality		Major Source in Drinking Water
		Range	Average	
Alkalinity	mg/L	123-141	129	Natural constituent
Boron NL = 1000	µg/L	768-888	803	Erosion of natural deposit
Calcium	mg/L	18-20	19	Natural constituent
Hardness, total (as $CaCO_3$)	mg/L	65-74	68	Natural constituent
Magnesium	mg/L	3.8-4.4	4.0	Natural constituent
Phosphate (as Phosphorus)	mg/L	0.07	0.07	Erosion of natural deposits; agricultural runoff
Potassium	mg/L	3.6-4.1	3.8	Natural constituent
Silica	mg/L	59	59	Erosion of natural deposit
Sodium	mg/L	47-54.7	50	Natural constituent
Vanadium	mg/L	<3-6.4	0.5	Erosion of natural deposit

Footnotes for Tables

(a) Radioactivity was last analyzed in 2008 except for uranium. Groundwater is required to be tested once every six years. The next round of sampling for radioactivity will take place in 2014.

(b) At-the-tap monitoring was conducted in 2013 as required by the Lead and Copper Rule. Control Gorge Power Plant is in compliance since the 90th percentile concentration for all samples of lead and copper are below their respective action levels. The average lead and copper concentrations after chlorination in 2013 were 8.1 and 187 µg/l respectively.

(c) Turbidity is monitored as an indicator of filtration performance. Systems must report the highest single measurement and the lowest monthly percentage of samples meeting the requirements specified for that technology.

Abbreviations for Tables

mg/L milligrams per Liter (equivalent to parts per million)

NTU Nephelometric Turbidity Units; Turbidity is a measure of the cloudiness of the water. It is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

pCi/L picoCuries per Liter (a unit of radioactivity)

µg/L micrograms per Liter (equivalent to parts per billion)

µS/cm micro Siemens per centimeter

TT Treatment Technique