Los Angeles Department of Water & Power

San Francisquito Power Plants 1 and 2

2023 DRINKING WATER QUALITY REPORT

The 2023 Annual Water Quality Report for San Francisquito Power Plant 1 (PP1) and Power Plant 2 (PP2) was prepared by the Los Angeles Department of Water and Power (LADWP). This annual Drinking Water Quality Report, also known as a Consumer Confidence Report, (CCR) is required by the California State Water Resources Control Board, Division of Drinking Water (DDW) and is prepared in accordance with their guidelines. The report provides information about drinking water at PP1 and PP2 during the 2023 calendar year (January 1, 2023 to December 31, 2023). Only those constituents that were detected are listed in this report.

SUMMARY

The water provided to PP1 and PP2 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 PP1 and PP2: Arsenic, Chlorine Residual, Copper, Lead, Fluoride, Gross Alpha Particle Activity, Haloacetic Acids, Trihalomethanes, Turbidity and Uranium. SWRCB-DDW allows LADWP to monitor for a number of contaminants less than once per year, because the concentrations of these contaminants do not change frequently. Some of the data, though representative, are more than one year old. The data for lead and copper on this table are the results of residential tap monitoring conducted in 2023 for PP1 as required by the Lead and Copper Rule (LCR). LADWP also was required to sample for Perchlorate at PP1 and PP2 in 2023 but these samples were not taken, therefore we cannot be sure of Perchlorate levels during this period. Sampling for Perchlorate was last done in 2021, when the results at both PP1 and PP2 were below the Detection Limit for purposes of Reporting. For more information on these contaminants, please refer to Table 1 “Health Based Primary Drinking Water Substances Detected.”

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.

PP1 and PP2 receive surface water from the Los Angeles Aqueduct (LAA). Prior to entering the distribution system, the water is disinfected with chlorine to address possible microbial contamination. It is also treated by filtration, coagulation, and flocculation to decrease turbidity and remove arsenic and other constituents. In addition, each of the homes and power plants is equipped with point-of-entry filters to further treat the water prior to usage.

SOURCE WATER ASSESSMENT

LADWP is required to conduct source water assessments every five years. In 2020, LADWP completed the assessment of the Owens Valley and Mono Basin watersheds that supply the Los Angeles Aqueduct. These sources are most vulnerable to geothermal activities that release naturally occurring arsenic into creeks that feed the Owens River. Other activities that impact water quality in these watersheds are livestock grazing, wildlife, and unauthorized public use of storage reservoirs. The impact to water quality from these activities is deemed to be minimal. Regular monitoring for Cryptosporidium and Giardia indicates that their presence is infrequent and at very low levels.

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.

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 organics, that are by-products 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 a result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (U.S. EPA) 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 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. 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).

HEALTH ADVISORY FOR
PEOPLE WITH WEAKENED IMMUNE SYSTEMS

Although LADWP treats its water to meet drinking water standards, 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).

Water Quality Update

There were no violations of drinking water standards at PP1 or PP2 during the 2023 calendar year.

A Do Not Drink Notice was issued at PP1 on May 5, 2023 due to storm water run-off from extensive storms creating conditions where raw water turbidity was greater than 25 NTU. Continued monitoring and sampling was conducted to confirm the safety of the water. DDW approval was confirmed prior to cancelling the Do Not Drink Notice on May 23, 2023.

A Do Not Drink Notice was issued at PP1 on June 20, 2023 due to the necessary rehabilitation of the storage tank. During this rehabilitation, a smaller temporary tank was used, and it was not possible to confirm that the water was properly disinfected. Following the tank rehabilitation, disinfection of the tank was completed, and bacterial monitoring was conducted to confirm the safety of the water. DDW approval was confirmed prior to cancelling the Do Not Drink Notice on July 24, 2023.

A Boil Water Notice was issued at both PP1 and PP2 on August 23, 2023 due to storm water runoff from extensive storms creating conditions where raw water turbidity was greater than 60 NTU. Continued monitoring and sampling was conducted to confirm the safety of the water. DDW approval was confirmed prior to cancelling the Boil Water Notice for both facilities on September 18, 2023.

A Boil Water Notice was issued at PP1 on November 9, 2023 due to an equipment malfunction at the PP1 storage tank. This malfunction prevented confirmation that the water was properly disinfected. Repairs were made and bacterial sampling was conducted to confirm the safety of the water. DDW approval was confirmed prior to cancelling the Boil Water Notice on November 20, 2023.

MONITORING OF REGULATED CONSTITUENTS

There are over 110 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. Constituents that pose acute risks 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

Arsenic compliance is based on a running annual average (RAA). The RAA was below the standard for PP1 and PP2 in 2023. While your drinking water meets the federal and state standard for arsenic, it may contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.

Disinfection Byproducts (DBPs)

Total trihalomethanes and haloacetic acids are byproducts of the disinfection process. The most recent analytical results show that levels of both contaminants are well below their respective MCLs.

Some people who drink water containing haloacetic acids and/or trihalomethanes in excess of the MCL over many years may have an increased risk of getting cancer. Liver, kidney, or central nervous system problems may also be experienced with long term consumption of water containing trihalomethanes in excess of the MCL.

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.

LEAD IN DRINKING WATER

Lead and Copper Rule (LCR) sampling was conducted in July 2023 for PP1 and August 2021 for PP2. The 90th percentile values for lead and copper at PP1 and at PP2 were well below the Lead and Copper Action Levels. This data, as well as other water quality data, are shown in tables on the following pages. Residential tap water sampling, as required by the Lead and Copper Rule (LCR), will be conducted in 2024 for both PP1 and PP2.

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. LADWP 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 or at http://www.epa.gov/lead.

MONITORING OF UNREGULATED CONSTITUENTS

There are constituents found in drinking water that are not yet regulated by the USEPA and SWRCB-DDW. Some of these "unregulated constituents" are monitored because they could be candidates for future regulations, or are of interest to our consumers.

TERMS USED IN THIS REPORT

AL (Action Level) – Federal: The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that 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 and 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 Standard): MCLs, MRDLs, and treatment techniques (TTs) for contaminants that affect health, along with their monitoring and reporting requirements.

SDWS (Secondary Drinking Water Standard): Highest level a constituent allowed in drinking water that may affect the taste, odor or appearance. SDWSs are set by the U.S. EPA.

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

POWER PLANT 1 - 2023 CALENDAR YEAR

Table 1: Health-Based Primary Drinking Water Substances Detected

Constituents / Contaminants	Major Source in Drinking Water	Sampled	Units	MEETS PRIMARY STANDARD / ACTION LEVEL (AL)	Primary Standard (MCL)	PHG	Water Quality	
							Range	Average
Arsenic[a]	Natural hot springs; erosion of natural deposits	2023	mg/L	YES	10	0.004	0.0	0.0
Chlorine Residual, Total (as Cl_2)[a]	Disinfectant	2023	mg/L	YES	4.0	4.0	0.66-1.69	1.18
Copper (at the tap)[b]	Internal corrosion of household water plumbing systems	7/2023	µg/L	YES	AL = 1300	300	Number of samples exceeding AL = 0 out of 5	90th percentile value = 344
Fluoride	Erosion of natural deposits	2023	mg/L	YES	2	1	0.340	0.340
Haloacetic Acids, Total (HAA5)[c]	Disinfection by-product	2023	µg/L	YES	60	N/A	12.8-25.4	20.3
Lead (at the tap)[b]	Internal corrosion of household water plumbing systems	7/2023	µg/L	YES	AL = 15	0.2	Number of samples exceeding AL = 0 out of 5	90th percentile value = 4
Total Tri-Halomethanes[c]	Disinfection by-product	2023	µg/L	YES	80	N/A	24.1-54.8	39.7
Turbidity[d]	Soil runoff	2023	NTU	YES	TT	TT	% reading ≤0.3: 100%	0.05
Uranium[e]	Erosion of natural deposits	2023	pCi/L	YES	20	0.43	6.2	0.05

Abbreviations for Tables

mg/L milligrams per Liter, equivalent to parts per million (ppm)
pCi/L picoCuries per Liter (a unit of radioactivity)
NTU Nephelometric Turbidity Units
µg/L micrograms per Liter, equivalent to parts per billion (ppb)
µS/cm micro Siemens per centimeter
ACU apparent color units

POWER PLANT 2 - 2023 CALENDAR YEAR

Table 1: Health-Based Primary Drinking Water Substances Detected

Constituents / Contaminants	Major Source in Drinking Water	Sampled	Units	MEETS PRIMARY STANDARD / ACTION LEVEL(AL)	Primary Standard (MCL)	PHG	Water Quality	
							Range	Average
Arsenic[a]	Natural hot springs; erosion of natural deposits	2023	mg/L	YES	10	0.004	0.0-1.3	0.3
Chlorine Residual, Total (as Cl_2)[a]	Disinfectant	2023	mg/L	YES	4.0	4.0	1.71-3.03	2.21
Copper (at the tap)[b]	Internal corrosion of household water plumbing systems	2021	µg/L	YES	AL=1300	300	Number of samples exceeding AL = 0 out of 5	90th percentile value =158
Fluoride	Erosion of natural deposits	2023	mg/L	YES	2	1	0.423	0.423
Haloacetic Acids, Total (HAA5)[c]	Disinfection by-product	2023	µg/L	YES	60	N/A	19.4-38.5	29.8
Lead (at the tap)[b]	Internal corrosion of household water plumbing systems	2021	µg/L	YES	AL = 15	0.2	Number of samples exceeding AL = 0 out of 5	90th percentile value = 2.2
Perchlorate	Industrial Use	8/2021	µg/L	YES	6	1	1.03	1.03
Total Tri-Halomethanes[c]	Disinfection by-product	2023		YES	80	N/A	41.9-70.4	53.9
Turbidity[d]	Soil runoff		NTU	YES	TT	TT	% reading ≤ 0.3 100%	0.04
Uranium[e]	Erosion of natural deposits	2023	pCi/L	YES	20	20	8.0	8.0

Footnotes for Table 1:

a. Values reflect Running Annual Average (RAA). RAA is a calculated average of all samples collected within the previous 12-month period, which may include test data from the previous calendar year.
b. At-the-tap monitoring was conducted in 2023 for PP1, as required by the Lead and Copper Rule. A system is out of compliance if the 90th percentile value of all samples taken exceeds the Action Level of 15 µg/L and 1300 µg/L of lead and copper, respectively.
c. The federal Stage 2 Disinfectants/Disinfection Byproducts Rule (Stage 2 DBPR) requires compliance monitoring and reporting for total trihalomethanes (TTHM) and five haloacetic acids (HAA5) based on Locational Running Annual Averages (LRAAs) of established monitoring locations.

d. Turbidity is a measure of the cloudiness of the water and is a good indicator of water quality and filtration performance. The Primary Drinking Water Standard for turbidity at the treatment plant is less than or equal to 0.3 NTU in at least 95% of the measurements taken in any month, and may not exceed 1.0 NTU for more than eight consecutive hours. High turbidity can hinder the effectiveness of disinfectants and can harbor pathogens. The reporting requirement for treatment plant turbidity is to report the highest single measurement in the calendar year and the lowest monthly percentage of measurements less than or equal to 0.3 NTU. Turbidity is monitored at 15-minute intervals all year round.
e. Radionuclides are collected on a 6-year frequency cycle, as determined by the DDW.

POWER PLANTS 1 and 2 - 2023 CALENDAR YEAR

Table 2: Regulated Substances with Secondary Drinking Water Standards Detected

Constituents/Contaminants	Major Source in Drinking Water	Units	Sampled	Federal & State Secondary Standard [SMCL]	Level Detected	
					Power Plant 1	Power Plant 2
Chloride	Runoff/leaching from natural deposits	mg/L	2023	500	38.7	35.0
Color	Naturally-occurring organic materials	ACU	2023	15	3	3
Specific Conductance, field	Substances that form ions when in water	uS/cm	2023	1600	217-549	209-625
Sulfate	Runoff/leaching from natural deposits	mg/L	2023	500	18.2	20.5
Total Dissolved Solids [TDS]	Runoff/leaching from natural deposits	mg/L	2023	1000	153	181
Turbidity	Soil runoff	NTU	2023	5	0.04-0.07	0.03-0.06

POWER PLANTS 1 and 2 - 2023 CALENDAR YEAR

TABLE 3: Unregulated Drinking Water Substances Detected

Constituents/Contaminants	Major Source in Drinking Water	Sampled	Units	Level Detected	
				Power Plant 1	Power Plant 2
Alkalinity, Total (as $CaC0_3$)	Natural hot springs; erosion of natural deposits	2023	mg/L	50.6	77-93
Bicarbonate	Erosion of natural deposits	2023	mg/L	61.7	93.9
Boron	Erosion of natural deposits	2023	µg/L	240	313
Calcium	Natural constituent	2023	mg/L	19.8	22.5
Chloride	Natural constituent	2023	mg/L	38.7	35.0
Magnesium	Natural constituent	2023	mg/L	3.26	3.84
pH, field	Naturally-occurring gases and minerals	2023	Units	6.84-7.86	6.72-8.62

Potassium	Natural constituent	2023	mg/L	N/A	N/A
Silica	Erosion of natural deposits	2023	mg/L	N/A	N/A
Sodium	Natural constituent	2023	mg/L	26.5	35.3
Total Hardness (as CaC03)	Natural constituent	2023	mg/L	62.9	72.0

GENERAL INFORMATION

This annual Drinking Water Quality Report (also known as a Consumer Confidence Report) is required by the California State Water Resources Control Board, Division of Drinking Water (SWRCB-DDW) and is prepared in accordance with their guidelines.

LADWP, the largest municipal utility in the nation, was established more than 100 years ago and provides a safe, reliable water and power supply to the city's more than 4 million residents and businesses. LADWP is governed by a five-member Board of Water and Power Commissioners, appointed by the Mayor and confirmed by the City Council. The Board meets regularly on the second and fourth Tuesdays of each month at 10:00 a.m.

Meetings are held at: **Los Angeles Department of Water and Power**
111 North Hope Street, Room 1555H
Los Angeles, CA 90012-2694

The meeting agenda is available to the public the Thursday prior to the week of the meeting. You can access the Board agenda at www.ladwp.com/board or via email at commission@ladwp.com. For general information about LADWP, call (800) 342-5397 or visit www.ladwp.com.

For questions regarding information in this report or the Source Water Assessment, please contact the Water Quality Hotline at 213-367-3182.