

# 2019 ANNUAL WATER QUALITY REPORT

# Prepared by Facilities Planning & Management



#### COMMITMENT

Cal Poly Pomona (CPP) is committed to providing high-quality drinking water to the campus community. The intent of this report is to keep the campus community informed about the quality of drinking water and measures the university has undertaken to safeguard its water supply. This report summarizes the quality of the water that was provided to the campus in 2019. Please read and learn more about campus water sources, results of water testing, and how the quality of the campus water measures up against state and federal standards.

#### ABOUT THIS REPORT

The CPP Facilities Planning & Management (FP&M) Department is pleased to present the 2019 Water Quality Report, which covers all testing performed between January 1, 2019, and December 31, 2019. The report contains information about the quality of the campus drinking water and the department's dedication to provide the highest-quality drinking water.

In order to ensure that water is safe to drink, the U.S. Environmental Protection Agency (EPA) and the State Water Resources Control Board (State Water Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. For 2019, the drinking water delivered to the campus community met or exceeded the standards established by these federal and state agencies. This annual report fully complies with the regulations of the 1996 Safe Drinking Water Act.



#### WATER SUPPLY SOURCES

CPP uses both ground and surface water supplies to produce drinking water. The majority of water produced comes from domestic groundwater Well 1 that is located on CPP's property and permitted by the State Water Board. This domestic water well is tapped into the Spadra groundwater basin and water extracted from this well is treated by a process known as reverse osmosis. The treated water may also be blended with water purchased from the Metropolitan Water District of Southern California (MWD).

MWD imports and treats surface water transported through two major conveyance systems: the 242-mile-long Colorado River Aqueduct and the 444-mile-long State Water Project (SWP). Water transported via the Colorado River Aqueduct originates in the Colorado River basin states, and water transported by the State Water Project conveyance system originates in the Sacramento-San Joaquin Delta. MWD treats this imported water at its Weymouth Filtration plant in the City of La Verne. The water is then purchased by CPP through our designated wholesale water agency, Three Valleys Municipal Water District (TVMWD).

#### SUBSTANCES THAT COULD BE IN WATER

In general, sources of drinking water (both tap 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.

The U.S. Food and Drug Administration (FDA) 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 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 that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA and the State Water Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

Additional information is available on the California Department of Public Health Website:

More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791 or online at http://www.epa.gov/safewater/

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 people, and infants, can be particularly at risk from infections. These people should seek advice about drinking water from their healthcare providers. The 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 at (800) 426-4791) or online at http://www.epa.gov/safewater/

https://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyProgram/Water.aspx

#### SOURCE WATER ASSESSMENTS

In July 2001, the State Water Board conducted source water assessments of CPP's groundwater sources, Wells 1 and 2, to determine the vulnerability of these water sources to possible contaminating activities. Summaries of the assessments may be requested by contacting the State Water Board Chief, Los Angeles Region, at (818) 551-2004. Copies of the complete assessments may be viewed at the State Board Angeles District Office, 500 N. Central Ave., Suite 500, Glendale, CA 91203. For more information, contact Joseph Phillipy, CPP Water Treatment Plant Chief Operator, at (909) 869-5189.

Based on the assessments, both water sources are considered most vulnerable to the following activities associated with contaminants detected in the water supply: illegal and/or unauthorized dumping activities, historical and present applications of fertilizers, and animal grazing. At CPP, nitrate and perchlorate have been detected because of the potential activities identified. Therefore, the nitrate and perchlorate level in CPP's groundwater are continuously tested and monitored. When the nitrate and perchlorate concentrations reach a certain level, the groundwater is blended with water supplied by MWD to keep the nitrate and perchlorate levels below the maximum contaminant level.

The assessments further conclude that these water sources are also considered most vulnerable to the following activities not associated with any detected contaminants: sewer collection systems, chemical/petroleum processing and/or storage systems, and potential leaking underground storage tanks. Contaminants potentially associated with these activities have **not** been detected in CPP's water supply.

Further Note About
Vulnerabilities: The inclusion of
these vulnerabilities does not
indicate that CPP considers itself
vulnerable — these are hypothetical
potential risks that were identified,
not violations that have occurred.



With the exception of animal grazing and fertilizers, which increase nitrates in the water, none of the identified risks have occurred. Since the 2001 assessments, CPP has implemented countermeasures to decrease its vulnerability, including increasing security, limiting access, and replacing and upgrading water monitoring systems.

In December 2002, MWD completed a source water assessment of its Colorado River and State Water Project supplies. This assessment was updated by the Colorado River Watershed Sanitary Survey – 2010 Update, and the State Water Project Watershed Sanitary Survey – 2011 Update. Water from the Colorado River is considered to be most vulnerable to recreation, urban/stormwater runoff, increasing urbanization in the watershed, and wastewater. State Water Project supplies are considered to be most vulnerable to urban/stormwater runoff, wildlife, agriculture, recreation, and wastewater. Copies of the assessments may be obtained by contacting MWD at (213) 217-6850.

# WATER QUALITY MONITORING



CPP routinely monitors for contaminants in its drinking water in accordance with federal and state laws. To minimize the presence of harmful bacteria or other pathogens, CPP is required to continuously disinfect the water. The disinfection levels of the water system are checked daily to ensure quality. Bacteria, which may indicate potential health risks, are monitored weekly. Over 500 tests for bacteria were conducted in 2019, and **no** tests exceeded bacteria limits.

Monitoring results for the period of January 1, 2019, to December 31, 2019, are identified in the tables located on the following pages. Table 1 contains chemicals and contaminants that have primarily a Maximum Contaminant Level (MCL). Table 2 shows the monitoring results for lead and copper at the consumers' taps. Table 3 lists chemicals and contaminants with secondary MCLs. Additional detected parameters of interest are also listed in Table 3. The following definitions are provided for terms and abbreviations contained in the tables that might be unfamiliar.

#### **ACRONYMS and ABBREVIATIONS**

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

**LRAA** = **Locational Running Annual Average**: Compliance is determined by a running annual average of all samples taken from a specific sampling location.

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 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. PHGs are set by the California Environmental Protection Agency.

**MRDL** = **Maximum Residual Disinfection Level:** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for the control of microbial contaminants.

MRDLG = Maximum Residual Disinfection 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.

**N/A = Not Applicable:** Monitoring requirements may vary between sources.

**ND = Not Detected:** Laboratory analysis indicates that the constituent is not present at detectable levels.

**NL** = Notification Level

**NM = Not Monitored:** The source was not monitored for the constituent.

NS = No Standard: No existing federal or state drinking water standard has been established.

**NTU = Nephelometric Turbidity Units** 

**PDWS = Primary Drinking Water Standard:** MCLs or 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 Environmental Protection Agency. **pCi/L = Picocuries Per Liter:** A measure of radioactivity in water.

ppb = Parts Per Billion: Parts per billion, or micrograms per liter (ug/L).

ppm = Parts Per Million: Parts per million, or milligrams per liter (mg/L).

**RAA = Running Annual Average:** Compliance is determined by a running annual average of all samples taken from a sampling point.

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

#### ADDITIONAL INFORMATION

#### **Nitrates**

CPP blends water from its approved domestic well with MWD sources to ensure that nitrates in the drinking water do not reach levels that may pose a health risk. CPP utilizes an automated control system that maintains nitrogen from nitrates at a level below 10 mg/L.

Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in serious illness. Symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant or if you are pregnant, you should seek advice from your healthcare provider. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity.



#### Lead

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. CPP is responsible for providing high-quality drinking water but cannot control the variety of materials used in plumbing components. When 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 want 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 <a href="http://www.epa.gov/lead">http://www.epa.gov/lead</a>.

#### Lead and Copper Sampling Program

In accordance with Federal Drinking Water Standards, CPP is periodically required to sample and test the water for the presence of lead and copper. While lead and copper are not normally found in drinking water in quantities that cause health concerns, lead and copper can leach out from plumbing fixtures containing lead solder. During June 2019, CPP tested for the presence of lead and copper at 30 campus sites. Results indicated that lead and copper did not exceed the action level at any site.

#### **Corrosion Control Program**

CPP has been proactive in its investigation of lead and copper sources on campus. Sources of lead and copper in drinking water are recognized to be from plumbing fixtures or soldered fittings that may have been installed prior to 1985. CPP has identified buildings that may have fittings containing lead or copper, and in 2006 implemented an approved corrosion control inhibitor. So far, this inhibitor has helped to eliminate or reduce both elements to levels where no action is required. Additionally, CPP has continued in 2019 to remove plumbing fixtures that may have contributed to small amounts of lead and/or copper within the buildings. CCP only installs plumbing fixtures that meet the California "Lead Free" Standards.

#### Federal Revised Total Coliform Rule

This Consumer Confidence Report (CCR) reflects changes in drinking water regulatory requirements during 2019. All water systems are required to comply with the state Total Coliform Rule. Beginning April 1, 2017, all water systems were also required to comply with the federal Revised Total Coliform Rule. The new federal rule maintains the purpose to protect public health by ensuring the integrity of the drinking water distribution system and monitoring for the presence of microbials (i.e., total coliform and E. coli bacteria). The EPA anticipates greater public health protection as the new rule requires water systems that are vulnerable to microbial contamination to identify and fix problems. Water systems that exceed a specified frequency of total coliform occurrences are required to conduct an assessment to determine if any sanitary defects exist. If found, these defects must be corrected by the water system.

#### **Turbidity**

Turbidity is a measure of the cloudiness of the water. CPP monitors turbidity because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.



#### **Unregulated Contaminant Monitoring**

Monitoring for unregulated contaminants helps the EPA and the State Water Board to determine where certain contaminants occur and whether the contaminants need to be regulated.

#### CONSERVING WATER

Climate change has accelerated the cycle of drought conditions in Southern California, and it is experiencing yet another year of minimal rain that will have a direct impact on lakes, reservoirs and groundwater aquifers. As Californians, it is our duty to make conservation a way of life and protect this precious resource. It is important that we all work together to incorporate water-use efficiency into our daily lives. To learn more about water conservation information and tips please visit: <a href="http://www.bewaterwise.com/">http://www.bewaterwise.com/</a> and/or <a href=

## READING THE WATER QUALITY DATA

In the 2019 Water Quality Data in the following tables, the first column of each water quality table lists the chemical/constituent detected in the water. The next columns list the average concentration and range of concentrations of the detected chemical/constituent. If applicable, the Public Health Goal (PHG) and/or Maximum Contaminant Level Goal (MCLG) that were established for each chemical/contaminant are also listed in the columns. All chemicals/constituents were monitored at either the well source or from the water distribution system during 2019. Data listed for the surface water were obtained from the 2019 monitoring conducted by MWD. The last two columns describe the likely source(s) of each contaminant detected in the drinking water and the potential health effects.

#### **CONTACTS FOR ADDITIONAL INFORMATION**

If you have specific questions about the quality of drinking water supplied to the campus community, please contact:

Joseph Phillipy
Chief Operator Water Treatment Plant
Facilities Planning & Management

<u>wateroperations@cpp.edu</u> (909) 869-5189

If you are considering any installations or modifications of equipment and/or systems that requires the use of campus water, please submit a service request to Facilities Customer Service Center for a complimentary assessment by our certified technicians regarding the federal, state and local regulatory requirements that may impact your project.

Facilities Customer Service Center fmcustomer@cpp.edu (909) 869-3030



### 2019 WATER QUALITY DATA

Cal Poly Pomona's drinking water was tested for the following contaminants/constituents listed in the tables, during the most recent monitoring completed in compliance with the regulatory permit requirements. 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. Not all the chemicals are required to be tested annually. Some of the data shown in this report are the same as published in the previous year. Unless otherwise noted, the data presented in these tables are from testing performed from January 1, 2019, through December 31, 2019.

TABLE 1. Regulated Contaminants with Primary MCLs, MRDLs, TTs, or ALs
---

#### Microbiological Contaminants

MCL	PHG	MWD	CPP Highest	Typical Sources	Health Effects
(AL)	(MCLG)	Highest #	# of positive	in Drinking Water	
[MRDL]	[MRDLG]	of positive	samples		
		samples	_		
More than 5% of	(0)	0	1	Naturally present in the	Coliforms are bacteria that are naturally present in the
monthly samples are				environment.	environment and are used as an indicator that other, potentially-
positive.					harmful, bacteria may be present.
*					,, p
A routine sample and	(0)	0	0	Human and animal fecal waste.	Fecal coliforms and E. coli are bacteria whose presence indicates
a repeat sample are					that the water may be contaminated with human or animal wastes.
total coliform					Microbes in these wastes can cause short-term effects, such as
positive, and one of					diarrhea, cramps, nausea, headaches, or other symptoms. They
these is also fecal					may pose a special health risk for infants, young children, and
coliform or E. Coli					people with severely compromised immune systems.
positive					people with severely compromised minute systems.
(a)	0		0	Human and animal fecal waste	E. coli are bacteria whose presence indicates that the water
(4)	, and the second	(from 1/1/	19 -12/31/19)		may be contaminated with human or animal wastes. Human
		(110111 1/1/	17 12/31/17)		pathogens in these wastes can cause short-term effects, such
					as diarrhea, cramps, nausea, headaches, or other symptoms.
					They may pose a greater health risk for infants, young children,
					the elderly, and people with severely compromised immune
					systems.
	(AL) [MRDL]  More than 5% of monthly samples are positive.  A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or E. Coli	(AL) [MRDL]  More than 5% of monthly samples are positive.  A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or E. Coli positive	(AL) [MRDL]  (MCLG) [MRDLG]  More than 5% of monthly samples are positive.  A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or E. Coli positive  (a)  (MCLG) (MCLG) (Highest # of positive samples  (0)  0	(AL) [MRDL] (MCLG) Highest # of positive samples  More than 5% of monthly samples are positive.  A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or E. Coli positive	(AL) [MRDL] (MCLG) Highest # of positive samples  More than 5% of monthly samples are positive.  A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or E. Coli positive  (a) 0 Highest # of positive samples  # of positive

<sup>(</sup>a) Routine and repeat samples are total coliform-positive and either is E. coli-positive or the system fails to take repeat samples following E. coli-positive routine sample or the system fails to analyze total coliform-positive repeat sample for E. coli.

#### Disinfection Byproducts, Disinfectant Residuals, and Disinfection Byproducts Precursors

Chemical or Constituent (reporting units)	MCL (AL)	PHG (MCLG)	MWD Supply		CPP System		Typical Sources in Drinking	Health Effects
	[MRDL]	[MRDLG]	Range	Highest LRAA (d)	Range	Highest LRAA (d)	Water	
Total Trihalomethanes (TTHMs) (ppb)	80	N/A	14-21	27	31-69	57.25	Byproduct of drinking water disinfection.	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 cancer.
Halo Acetic Acids (HAA5s) (ppb)	60	N/A	ND-9	6	4.10-12.0	10.35	Byproduct of drinking water disinfection.	Some people who drink water containing halo acetic acids in excess of the MCL over many years may have an increased risk of cancer.

Total Chlorine Residual (ppm)	[MRDL] 4.0 (as Cl <sub>2)</sub> )	[MRDLG] 4.0 (as Cl <sub>2)</sub> )	0.9-2.9	2.4	1.07-1.40	1.19	Drinking water disinfectant added for treatment.	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.
Organic Contaminan	ts							
Chemical or Constituent	MCL	PHG	MWD Supply		CPP System		Typical Sources	Health Effects
(reporting units)	(AL)	(MCLG)	Range	Average	Range	Average	in Drinking Water	
Trichloroethylene [TCE] (ppb)	5	1.7	ND	ND	ND	ND	Discharge from metal degreasing sites and factories.	Some people who use water containing trichloroethylene in excess of the MCL over many years may experience liver problems and may have an increased risk of cancer.
Inorganic Contamina	ints							
Chemical or Constituent	MCL	PHG	MWD	Supply	CPP System		Typical Sources	Health Effects
(reporting units)	(AL)	(MCLG)	Range	Average	Range	Average	in Drinking Water	
Aluminum (ppb)	1000	600	ND-110	105	ND	ND	Erosion of natural deposits; residue from some surface water treatment processes.	Some people who drink water containing aluminum in excess of the MCL over many years may experience short-term gastrointestinal tract effects.
Arsenic (ppb)	10	0.004	ND	ND	ND	ND	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes.	Some people who drink water containing arsenic in excess of the MCL over many years may experience skin damage or circulatory system problems, and may have an increased risk of cancer.
Barium (ppb)	1000	2000	ND	ND	120	120	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits.	Some people who drink water containing barium in excess of the MCL over many years may experience an increase in blood pressure.
Fluoride (ppm)	2	1	0.6-0.9	0.7	0.2-0.3	0.26	Erosion of natural deposits; water additive to promote strong teeth; discharge from fertilizer and aluminum factories.	Some people who drink water containing fluoride in excess of the federal MCL of 4 mg/L over many years may get bone disease, including pain and tenderness of the bones. Children who drink water containing fluoride in excess of the state MCL of 2 mg/L may get mottled teeth.
Inorganic Contamina	ints							
Chemical or Constituent (reporting units)	MCL (AL)	PHG (MCLG)	MWD	Supply	CPP System		Typical Sources in Drinking	Health Effects
(reporting times)	(2112)	(MCLG)	Range	Average	Range	Average	Water	
Nitrate (ppm)  Note: Groundwater and surface water are blended before distribution to the campus to ensure water quality.	10 (as Nitrogen)	10 (as Nitrogen)	ND-0.5	0.2	4.6-7.1 (b)	6.0 (b)	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women.

(reporting units)	(AL)	(MCLG)	90 <sup>th</sup> percentile	# of samples	90 <sup>th</sup> percentile	# of samples	in Drinking Water	
TABLE 2. Lead a	MCL	PHG	toring a		ner's Tap		Typical Sources	Health Effects
Uranium (pCi/L)	20	0.43	ND	ND	6.32	6.32	Erosion of natural deposits.	Some people who drink water containing uranium in excess of the MCI over many years may have kidney problems or an increased risk o cancer.
Gross beta particle activity (pCi/L)	50(e)	(0)	ND	ND	NM	NM	Decay of natural and man-made deposits.	Certain minerals are radioactive and may emit forms of radiation known as photons and beta radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.
Gross alpha particle activity (pCi/L)	15	(0)	ND	ND	9.61	9.61	Erosion of natural deposits.	Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of cancer.
(reporting units)	(AL)	(MCLG)	Range	Average	Range	Average	in Drinking Water	
Radioactive Contami Chemical or Constituent	nants MCL	PHG	MWI	O Supply	CPP S	ystem	Typical Sources	Health Effects
Total Chromium (ppb)	50	1	ND	ND	1.8-2.4	2.4	Industrial metal plating activities.	Some people who drink water containing chromium in excess of the MCL may experience allergic dermatitis.
Perchlorate (ppb)  Note: Groundwater and surface water are blended before distribution to the campus to ensure water quality.	6	6	ND	ND	<4-4.0(b)	<4 (b)	Perchlorate is an inorganic chemical used in solid rocket propellant, explosives, and matches.	Perchlorate has been shown to interfere with uptake of iodide by the thyroid gland, and reduce the production of thyroid hormones, leading to adverse effects associated with inadequate hormone levels. Thyroid hormones are needed for normal prenatal growth and development of the fetus, as well as for normal growth and development in the infant and child. In adults, thyroid hormones are needed for normal metabolism and mental function.

Chemical or Constituent	MCL	PHG	MWD	Supply	CPP Sy	stem	Typical Sources	Health Effects
(reporting units)	(AL)	(MCLG)	90 <sup>th</sup> percentile	# of samples >AL	90 <sup>th</sup> percentile	# of samples >AL	in Drinking Water	
Lead (ppb) (June 2019)	(15)	0.2	ND	0	ND (c)	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.	Infants and children who drink water containing lead in excess of the action level may experience delays in their physical or mental development. Children may show slight deficits in attention span and learning abilities. Adults who drink this water over many years may develop kidney problems or high blood pressure.
Copper (ppb) (June 2019)	(1,300)	300	ND	0	100 (c)	0	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time may experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years may suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

Chemical or Constituent	MCL	PHG	MWD	Supply	CPP S	System	Typical Sources in	Health Effects / Comments  There are no PHGs, MCLGs, or mandatory standard health affects language for these constituents because secondary MCLs are set on the basis of aesthetics.
(reporting units)	(Secondary MCL)	(MCLG)	Range	Avg	Range	Average	Drinking Water	
Chloride (ppm)	(500)	NA	46-55	50	72	72	Runoff/leaching from natural deposits; seawater influence.	N/A
Color (units)	(15)	NA	ND-1	1	ND	0	Naturally occurring organic materials.	N/A
Hardness (ppm)	NA	NA	101-116	108	530	530	Usually naturally occurring.	N/A
Odor threshold (units)	(3)	NA	< 1-2	1	ND	ND	Naturally occurring organic materials.	N/A
Sodium (ppm)	NA	NA	46-54	50	41	41	Naturally occurring.	N/A
Sulfate (ppm)	(500)	NA	190-236	213	160	160	Runoff/leaching from natural deposits; industrial wastes.	N/A
Total dissolved solids (ppm)	(1,000)	NA	244-289	266	740	740	Runoff/leaching from natural deposits.	N/A
Turbidity (NTU)	(5)	NA	ND	ND	ND-1.15	ND	Soil runoff.	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 that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.
Other: Unregulate	d Parame	eters						
Chemical or Constituent	MCL	PHG	MWD Supply		CPP System		Typical Sources in	Health Effects
(reporting units)	(Secondary MCL)	(MCLG)	Range	Avg	Range	Average	Drinking Water	
B ( 1)		. TT		1			/ -	

(a) There are no PHGs, MCLGs, or mandatory standard health affects language for these constituents because secondary MCLs are set on the basis of aesthetics.

NM

(b) Based on weekly sampling of treated well water and MWD water that is supplied to the campus.

NL = 1,000

- (c) Results listed for lead and copper are 90th percentile and exceeded values determined from 30 samples collected within CPP's distribution system.
- (d) Compliance is determined by a running annual average of all the samples taken from a sampling point.

130

(e) Effective 6/11/2006, the gross beta particle activity MCL is 4 millirems/year annual dose equivalent to the total body or any internal organ. 50 pCi/L is used as a screening level.

#### **KEY LEGENDS**

NM

N/A

#### (also see Acronyms and Abbreviations)

**AL** = Regulatory Action Level

Boron (ppb)

**LRAA** = Locational Running Annual Average

NL =

1,000

**MCL** = Maximum Contaminant Level

**MCLG** = Maximum Contaminant Level Goal

**MFL** = Million Fibers per Liter

**MRDL** = Maximum Residual Disinfectant Level

**MRDLG** = Max. Residual Disinfectant Level Goal

N/A = Not Applicable

ND = Not Detected

130

**NL** = Notification Level

**NM** = Not Monitored

NS = No Standard

**NTU** = Nephelometric Turbidity Units

pCi/L = picocuries per liter (a measure of radioactivity)

**PDWS** = Primary Drinking Water Standard

**PHG** = Public Health Goal

effects, based on studies in laboratory animals.

**ppb** = parts per billion, or micrograms per liter ( $\mu$ g/L)

The babies of some pregnant women who drink water containing boron in

excess of the notification level may have an increased risk of developmental

ppm = parts per million, or milligrams per liter (mg/L)

**ppq** = parts per quadrillion, or picograms per liter

**RAA** = Running Annual Average

**TT** = Treatment Technique