



# 2017 WATER QUALITY REPORT



**CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA**

## ABOUT THIS REPORT

Cal Poly Pomona (CPP) is proud to provide its 2017 Water Quality Report, which contains information about the quality of its drinking water and the efforts made to continue providing quality water to the campus. In 2017, CPP's drinking water met or exceeded all drinking water health standards of the United States Environmental Protection Agency (USEPA) and the State of California Department of Public Health (CDPH).

The USEPA, the State Water Resources Control Board (State Board), and the California Public Utilities Commission (CPUC) are the agencies responsible for establishing drinking water quality standards. The drinking water delivered to campus facilities and businesses meets standards established by all three agencies. CPP uses independent, state-certified water quality laboratories for testing. In some cases, the campus goes beyond what is required to monitor for constituents (elements) that have known health risks. Unregulated contaminant monitoring helps the USEPA determine where certain contaminants may occur and whether it needs to regulate those contaminants.

This year's report complies with the regulations of the 1996 Safe Drinking Water Act reauthorization that charges the USEPA with updating and strengthening the tap water regulatory program.

## SOURCES OF WATER SUPPLY

Water supplied to CPP comes from both ground and surface water. Groundwater is supplied from a domestic well located on CPP's property and permitted by the State Board. Water from this well is treated by a process known as "Reverse Osmosis" and may also be blended with water purchased from the Metropolitan Water District of Southern California (MWD), which consists of imported surface water from the Colorado River and the State Water Project in Northern California. The quality of both the ground and surface water is presented in this report. The blended water quality and contaminant levels served to the campus list the contaminants which are of the most health risk.

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. 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 storm water 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 storm water 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 storm water runoff, and septic systems.
- *Radioactive contaminants* that 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 USEPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

The US Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health. Additional information is available on the

California Department of Public Health Website  
(<https://www.cdph.ca.gov/Programs/CEH/DFDCS/Pages/FDBPrograms/FoodSafetyPrograms/Water.aspx>).

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 the USEPA's Safe Drinking Water Hot-line

(1-800-426-4791) or online at:

<http://www.epa.gov/safewater/>.

Some people may be more vulnerable to contaminants in drinking water than the general population. 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. The USEPA/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) or at:

<http://www.epa.gov/safewater/>.

**In ongoing support of environmental sustainability, CPP recognizes its responsibilities to the global community. Water conservation information and tips are available online at: <http://www.bewaterwise.com/>**

**and <http://www.epa.gov/watersense>.**



## SOURCE WATER ASSESSMENTS

In July 2001, the State 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 Board Chief, Los Angeles Region (1-818-551-2004). 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 Javier Arreguin, CPP Water Treatment Operations Manager (1-909-869-5189).

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* has been the only contaminant ever detected as a result of the potential activities identified. Therefore, the nitrate level in CPP's groundwater is continuously metered, tested, and monitored. When the nitrate reading reaches a certain level, the groundwater is blended with water supplied by MWD to keep the nitrate level 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 is not to say 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 risks identified 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 (1-213-217-6850).



## 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 also 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 during 2017, with NO exceeded limits found.

Monitoring results for the period of January 1 to December 31, 2017, are identified in the tables located on the following pages. Table 1 contains chemicals and contaminants that have primary MCLs. 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 definitions below are provided for terms and abbreviations contained in the tables that might be unfamiliar.

### TOTAL TRIHALOMETHANES MCL VIOLATION

During March of 2017, Total Trihalomethanes (TTHMs) were found in the campus water at levels that exceeded the drinking water standard for TTHMs. Water sample results received on March 30, 2017, showed TTHMs at a level of 82 parts per billion, which was above the standard or MCL of 80 parts per billion. This was due to an increase of water from the State Water Project (SWP) aqueduct system treated through the MWD Weymouth Treatment Plant that CPP receives for its potable water use. As of April 10, 2017, CPP has decreased its use of treated SWP water and now treats and produces the majority of its water with Reverse Osmosis. The standard required has been continuously met since April of 2017. Please note that TTHMs are a byproduct of drinking water disinfection and do not pose an immediate risk. However, some people who drink water containing TTHMs 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.

### ACRONYMS and ABBREVIATIONS

- **AL = Regulatory Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which 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 addition of a disinfectant is necessary for 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 the 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 EDUCATIONAL 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 which 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 health care 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 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/lead>.

### 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 the supplied drinking water in quantities which are of any health concern, lead and copper can leach out from plumbing fixtures containing lead solder. During June 2016, 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 which may have been installed prior to 1985. CPP has identified several buildings which may have fittings containing lead or copper and, in 2006, implemented an approved corrosion control inhibitor. So far, this inhibitor has proven to eliminate or reduce both elements to levels where no action is required. Additionally, CPP has continued in 2017 to remove plumbing fixtures which 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 2017. All water systems are required to comply with the state Total Coliform Rule. Beginning April 1, 2017, all water systems are 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 U.S. 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 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.

## WATER QUALITY TABLES

The first column of each water quality table that follows lists the chemical/constituent detected in the water. The next columns list the average concentration and range of concentrations of the detected chemical. All chemicals and constituents were monitored at either the well source or from the water distribution system during 2017. Data listed for the surface water is taken from monitoring conducted during 2017 by MWD.

Also listed is the PHG (or MCLG, if applicable) established for each chemical/contaminant. The last column describes the likely source(s) of each contaminant detected in the drinking water.

## CONTACTS

Before installing or modifying any equipment that utilizes the campus water in or at a building, submit a service request to Facilities Customer Service for a complimentary assessment by Facilities Management regarding federal, state and local requirements.

### **Facilities Customer Service**

[fmcustomer@cpp.edu](mailto:fmcustomer@cpp.edu)

909-869-3030

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

### **Javier Arreguin**

### **Water Treatment Operations Manager**

### **Facilities Management**

[wateroperations@cpp.edu](mailto:wateroperations@cpp.edu)

909-869-5189



## 2017 WATER QUALITY DATA

The tables that follow identify all the contaminants/constituents that Cal Poly Pomona's drinking water was tested for and the contaminants detected, if any, during the most recent monitoring done in compliance with regulations. The State allows monitoring for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Unless otherwise noted, the data presented in this table is from testing completed from January 1, 2017 through December 31, 2017. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. For further information, additional health risk statements are included in the following tables

<b>TABLE 1. Regulated Contaminants with Primary MCLs, MRDLs, TTs, or ALs</b>						
<b>Microbiological Contaminants</b>						
Chemical or Constituent (reporting units)	MCL (AL) [MRDL]	PHG (MCLG) [MRDLG]	MWD Highe st # of positi ve sampl es	Cal Poly Highest # of positive samples	Typical Sources in Drinking Water	Health Effects Language
Total Coliform Bacteria (State Total Coliform Rule) (number of positive samples in any one month)	More than 5% of monthly samples are positive.	(0)	0	0	Naturally present in the environment.	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present.
Fecal Coliform or <i>E. Coli</i> (State Total Coliform Rule) (number of positive samples during the year)	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. Coli</i> positive	(0)	0	0	Human and animal fecal waste.	Fecal coliforms and <i>E. coli</i> are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.
<i>E. coli</i> (Federal Revised Total Coliform Rule)	(a)	0	0 (from 1/1/17 - 12/31/17)		Human and animal fecal waste	<i>E. coli</i> are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human 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.
(a) Routine and repeat samples are total coliform-positive and either is <i>E. coli</i> -positive or system fails to take repeat samples following <i>E. coli</i> -positive routine sample or system fails to analyze total coliform-positive repeat sample for <i>E. coli</i> .						



Disinfection Byproducts, Disinfectant Residuals, and Disinfection Byproducts Precursors								
Chemical or Constituent (reporting units)	MCL (AL) [MRDL]	PHG (MCLG) [MRDLG]	MWD Supply		Cal Poly System		Typical Sources in Drinking Water	Health Effects Language
			Range	Highest LRAA (d)	Range	Highest LRAA (d)		
Total Trihalomethanes (TTHMs) (ppb)	80	N/A	21-43	44	19-111	44.50	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 getting cancer.
Halo acetic Acids (HAA5s) (ppb)	60	N/A	6.4-26	17	4.8-52	22.73	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 getting cancer.
Total Chlorine Residual (ppm)	[MRDL] 4.0 (as Cl <sub>2</sub> )	[MRDLG] 4.0 (as Cl <sub>2</sub> )	1.1-3.1	2.4	0.67-1.40	1.02	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 Contaminants								
Chemical or Constituent (reporting units)	MCL (AL)	PHG (MCLG)	MWD Supply		Cal Poly System		Typical Sources in Drinking Water	Health Effects Language
			Range	Average	Range	Average		
Trichloroethylene [TCE] (ppb)	5	1.7	ND	ND	ND	ND	Discharge from metal degreasing sites and other 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 getting cancer.
Inorganic Contaminants.								
Chemical or Constituent (reporting units)	MCL (AL)	PHG (MCLG)	MWD Supply		Cal Poly System		Typical Sources in Drinking Water	Health Effects Language
			Range	Average	Range	Average		
Aluminum (ppb)	1000	600	ND-210	170	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 getting cancer.
Barium (ppb)	1000	2000	144	144	120-130	125	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	0.5-0.9	0.7	0.2-0.3	0.25	Erosion of natural deposits; water additive that promotes 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 Contaminants continued								
Chemical or Constituent (reporting units)	MCL (AL)	PHG (MCLG)	MWD Supply		Cal Poly System		Typical Sources in Drinking Water	Health Effects Language
			Range	Average	Range	Average		
Nitrate (ppm)  Note: Groundwater and surface water are blended before distribution to the campus to ensure water quality.	10 (as Nitrogen)	10 (as Nitrogen)	0.2-0.5	0.25	13-15  (Before blend)	14 Before blend 6.1 (b) (after blend)	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.
Perchlorate (ppb)  Note: Groundwater and surface water are blended before distribution to the campus to ensure water quality.	6	6	ND	ND	4.5-9.2 (before blend)	7.0 (before blend)  <4 (b) (after blend)	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 to thereby 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.
Total Chromium (ppb)	50	1	ND	ND	1.8-2.4	2.0	Industrial Metal Plating Activities.	Some people who drink water containing chromium in excess of the MCL may experience allergic dermatitis.
Hexavalent Chromium (ppb)	10	0.02	ND	ND	1.8	1.8	Industrial Metal Plating Activities.	Some people who drink water containing hexavalent chromium in excess of the MCL may have an increased risk of developing cancer.
Radioactive Contaminants								
Chemical or Constituent (reporting units)	MCL (AL)	PHG (MCLG)	MWD Supply		Cal Poly System		Typical Sources in Drinking Water	Health Effects Language
			Range	Average	Range	Average		
Gross Alpha Particle Activity (pCi/L)	15	(0)	ND-4	ND	NM	NM	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 getting cancer.
Gross Beta Particle Activity (pCi/L)	50(e)	(0)	4-6	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.
Uranium (pCi/L)	20	0.43	2-3	ND	NM	NM	Erosion of natural deposits.	Some people who drink water containing uranium in excess of the MCL over many years may have kidney problems or an increased risk of getting cancer.



**TABLE 2. Lead and Copper Monitoring at Consumer's Tap**

Chemical or Constituent (reporting units)	MCL (AL)	PHG (MCLG)	MWD Supply		Cal Poly System		Typical Sources in Drinking Water	Health Effects Language
			90 <sup>th</sup> Percentile	# of samples >AL	90 <sup>th</sup> Percentile	# of samples >AL		
Lead (ppb) (June 2016)  Number of Schools Requesting Testing (0)	(15)	0.2	ND	0	5.7 (c)	3	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 2016)	(1,300)	300	ND	0	230 (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.

**TABLE 3. Regulated Contaminants with a Secondary MCL(a), Unregulated, and Other Parameters**

Chemical or Constituent (reporting units)	MCL (Secondary MCL)	PHG (MCLG)	MWD Supply		Cal Poly System		Typical Sources in Drinking Water	Health Effects Language / 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.
			Range	Avg	Range	Average		
Chloride (ppm)	(500)	NA	29-66	48	72-76	73	Runoff/leaching from natural deposits; seawater influence.	N/A
Color (units)	(15)	NA	1-2	2	ND	0	Naturally-occurring organic materials.	N/A
Hardness (ppm)	NA	NA	58-152	105	550-560	560	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	35-64	50	41-42	42	Naturally occurring.	N/A
Sulfate (ppm)	(500)	NA	46-123	84	170	170	Runoff/leaching from natural deposits; industrial wastes.	N/A
Total Dissolved Solids (ppm)	(1,000)	NA	179-364	272	670-770	740	Runoff/leaching from natural deposits.	N/A
Turbidity (NTU)	(5)	NA	ND	ND	ND-2.0	0.18	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: Unregulated Parameters								
Chemical or Constituent (reporting units)	MCL (Secondary MCL)	PHG (MCLG)	MWD Supply		Cal Poly System		Typical Sources in Drinking Water	Health Effects Language
			Range	Avg	Range	Average		
Boron (ppb)	NL = 1,000	NL= 1,000	150	150	NM	NM	N/A	The babies of some pregnant women who drink water containing boron in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals.

- (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.
- (b) Based on weekly sampling of blend of well water and MWD water that is supplied to the campus.
- (c) Results listed for lead and copper are 90<sup>th</sup> 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.
- (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

(also see Acronyms and Abbreviations)

**AL** = Regulatory Action Level  
**LRAA** = Locational Running Annual Average  
**MCL** = Maximum Contaminant Level  
**MCLG** = Maximum Contaminant Level Goal  
**MFL** = million fibers per liter  
**MRDL** = Maximum Residual Disinfectant Level  
**MRDLG** = Maximum Residual Disinfectant Level Goal  
**N/A** = Not Applicable  
**ND** = Not Detected  
**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  
**ppb** = parts per billion, or micrograms per liter (µg/L)  
**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