2018 Consumer Confidence Report

Water System Name:	Penngrove Wat	ter Company	Report Date:	07/01/2019
e e	1 , 0		ired by state and federal and federal and may include	regulations. This report shows the earlier monitoring data.
Este informe contiene Company_para asistir	•	y importante sobre su a	gua para beber. Favor o	le comunicarse Penngrove Water
Type of water source(s) in use: Sono	ma County Water Agency	y, Petaluma Aqueduct	
Name & general location	on of source(s):	Tank Farms from the F Wells.	Petaluma Aqueduct, Russia	an River, Santa Rosa Production
Drinking Water Source Time and place of reg Drinking Water 707-5	ularly scheduled b		participation: Information	is available at the Department of
For more information,	contact: Ms. C	avaz	Phone:	(707) 539-6397

TERMS USED IN THIS REPORT

Maximum Contaminant Level (MCL): 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.

Maximum Contaminant Level Goal (MCLG): 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 (U.S. EPA).

Public Health Goal (PHG): 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.

Maximum Residual Disinfectant Level (MRDL): 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.

Maximum Residual Disinfectant Level Goal (MRDLG): 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.

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

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

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

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

Variances and Exemptions: Permissions from the State Water Resources Control Board (State Board) to exceed an MCL or not comply with a treatment technique under certain conditions.

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

ND: not detectable at testing limit

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

ppb: parts per billion or micrograms per liter (μg/L)

ppt: parts per trillion or nanograms per liter (ng/L)

ppq: parts per quadrillion or picogram per liter (pg/L)

pCi/L: picocuries per liter (a measure of radiation)

The sources of drinking water (both tap water 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 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 organic chemicals, that are byproducts 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 the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. EPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, 5, and 6 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old. Any violation of an AL, MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA						
Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria	
Total Coliform Bacteria (state Total Coliform Rule)	(In a month)	0	1 positive monthly sample	0	Naturally present in the environment	
Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule)	(In the year)	0	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	Human and animal fecal waste	
E. coli (federal Revised Total Coliform Rule)	(In the year)	0	(a)	0	Human and animal fecal waste	

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

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER								
Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of Samples Collected	90 th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	6/18	10	<0.051	0	15	0.2	0	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	6/18	10	<0.146	0	1.3	0.3	Not applicable	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

_	TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS								
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant			
Sodium (ppm)	9/18	8.2	8.8	None	None	Salt present in the water and is generally naturally occurring			
Hardness (ppm)	9/18	106	111	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring			
TABLE 4 – DET	ECTION O	F CONTAMIN	ANTS WITH A	PRIMARY	DRINKING	WATER STANDARD			
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant			
Aluminum (ppm)	9/18	<.050	<.050	1	0.6	Erosion of natural deposits, residue from some surface water treatment process.			
Antimony (ppb)	9/18	<6	<6	6	N/A	Discharge from petroleum refineries, fire retardants, ceramics, electronic, solder.			
Arsenic(ppb)	9/18	<2.2	<2.2	10	N/A	Erosion of natural deposits, runoff from orchards, glass and electronics production waste.			
Barium (ug/L)	9/18	<0.10	<0.10	1	N/A	Discharge from oil drilling wastes and metal refineries, erosion of natural deposits.			
Beryllium (ug/L)	9/18	<1.0	<1.0	4	N/A	Discharge from metal refineries, coal burning factories, electrical aerospace and defense industries.			
Cadmium (ug/L0	9/18	<1.0	<1.0	5	.07	Internal corrosion of galvanized pipes, erosion of natural deposits, discharge from electroplating, industrial chemical factories, metal refineries, runoff from batteries and paint.			
Chromium (ug/L)	9/18	<10	<10	50	N/A	Discharge from steel and pulp mills, chrome plating, erosion of natural deposits.			
Chromium Hexavalent	9/18	.58	1.7	None	None	Discharge from electroplating, leather tanneries, wood preservation, refractory production, textile manufacturing, erosion and natural deposits.			
Mercury (ug/L)	9/18	<0.20	<0.20	2	1.0	Erosion of natural deposits, discharge from refineries and factories, runoff from landfills and cropland.			
Nitrate (mg/L)	9/18	< 0.4	<0.4	10	.4	Runoff from fertilizer usage, leaching from septic tanks, sewage.			
Nickel (ug/L)	9/18	<10	<10	100	10	Erosion of natural deposits, discharge from metal factories.			
Selenium (ug/L)	9/18	<5	<5	50	5	Discharge from petroleum, glass and metal refineries, erosion of natural deposits, discharge from mines and chemical factories, runoff from livestock lots (feed additive).			
Thallium (ug/L)	9/18	<1	<1	2	1.0	Leaching from ore processing sites, discharge from electronics, glass and drug factories.			
Zinc (ppb)	9/18	<50	<50	50	50	Runoff/leaching from natural deposits; industrial waste.			

and from industrial manufactures.

TABLE 5 – DETE Chemical or Constituent	Sample	Level Detected	Detection Range	SMCL	PHG	T-micel Course of Courteminent
(and reporting units)	Date		Detection Range	SNICL	(MCLG)	Typical Source of Contaminant
Sulfate (ppm)	9/18	12	12	500	N/A	Runoff/leaching form natural deposits, industrial.
Chloride (ppm)	9/18	5.3	6.7	500	N/A	Runoff/leaching from natural deposits, seawater influence.
Specific Conductance	9/18	240	260	1600	N/A	Substance that form ion when in water, seawater influence.
Foaming Agents (MBAS) (ppm)	9/18	< 0.05	<0.05	500	N/A	Municipal and industrial waste discharges.
Copper (ug/L)	9/18	<50	<50	1000	N/A	Internal corrosion of household plumbing systems, erosion of natural deposits, leaching of wood preservatives.
Iron (ppb)	9/18	100	300	300	300	Leaching rom natural deposits, industrial waste.
Manganese (ppb)	9/18	<20	<20	50	N/A	Leaching from natural deposits.
Silver (ppb)	9/18	<10	<10	100	N/A	Industrial discharges.
Color	9/18	<3.0	<3.0	15	15	Naturally occurring organic materials.
	TABLE	6 – DETECTIO	N OF UNREGUL	ATED CO	NTAMINA	NTS
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Level Detected	Notifica	ntion Level	Health Effects Language
Methyltertbutylether (MTBE)	9/18	ND	ND		5	Discharge from petroleum refinerie & industrial chemical factories.
Trihalomethances (Total)	9/18	0.01	0.01		80	Byproduct of drinking water chlorination.
2,4-DB	9/18	<10	<10	70		Residue from herbicide.
2,45-T	9/18	<2	<2	50		Residue from banned herbicide.
Asbestos (ppb)	9/18	ND	ND	7		Internal corrosion of asbestos cement water mains, erosion of natural deposits.
Boron(ppb)	2 x 03	340	ND	1000		Erosion of natural deposits.
Vanadium (ppb)	2 x 03	5.7	ND		50	Erosion of natural deposits.
Perchlorate	10/15	<4	<4		6	Runoff/leaching of natural deposits

Additional General Information on Drinking Water

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 U.S. EPA's Safe Drinking Water Hotline (1-800-426-4791).

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).

Lead-Specific Language: 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. Penngrove Water Company 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. [OPTIONAL: If you do so, you may wish to collect the flushed water and reuse it for another beneficial purpose, such as watering plants.] 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.

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

VIOLATION OF A MCL, MRDL, AL, TT, OR MONITORING AND REPORTING REQUIREMENT							
Violation	Explanation Duration Actions Taken to Correct the Violation Language						
None							

For Water Systems Providing Groundwater as a Source of Drinking Water

TABLE 7 – SAMPLING RESULTS SHOWING FECAL INDICATOR-POSITIVE GROUNDWATER SOURCE SAMPLES							
Microbiological Contaminants (complete if fecal-indicator detected) Total No. of Detections Sample Dates MCL [MRDL] PHG (MCLG) [MRDLG] Typical Source of Contamina							
E. coli	(In the year)	0	0	(0)	Human and animal fecal waste		
Enterococci	(In the year)	0	TT	N/A	Human and animal fecal waste		
Coliphage	(In the year)	0	TT	N/A	Human and animal fecal waste		

Summary Information for Fecal Indicator-Positive Groundwater Source Samples, Uncorrected Significant Deficiencies, or Groundwater TT

	SPECIAL NOTICE OF FECAL INDICATOR-POSITIVE GROUNDWATER SOURCE SAMPLE
None	
	SPECIAL NOTICE FOR UNCORRECTED SIGNIFICANT DEFICIENCIES

None						
VIOLATION OF GROUNDWATER TT						
TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language		
N/A						

For Systems Providing Surface Water as a Source of Drinking Water

TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES				
Treatment Technique ^(a) (Type of approved filtration technology used)	N/A			
Turbidity Performance Standards (b) (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 – Be less than or equal to NTU in 95% of measurements in a month. 2 – Not exceed NTU for more than eight consecutive hours. 3 – Not exceed NTU at any time.			
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.				
Highest single turbidity measurement during the year				
Number of violations of any surface water treatment requirements				

Summary Information for Violation of a Surface Water TT

VIOLATION OF A SURFACE WATER TT								
TT Violation	TT Violation Explanation Duration Actions Taken to Correct the Violation Language							
N/A								

Summary Information for Operating Under a Variance or Exemption

None			

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

⁽b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

Summary Information for Federal Revised Total Coliform Rule Level 1 and Level 2 Assessment Requirements

Level 1 or Level 2 Assessment Requirement not Due to an E. coli MCL Violation

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments. During the past year we were required to conduct $\underline{\theta}$ Level 1 assessment(s). During the past year we were required to conduct $\underline{\theta}$ Level 2 assessment(s).

None	
Level 2 Assessment Requirement Due to an E. coli MCL Violation	
$E.\ coli$ are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Humathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other sympton hey may pose a greater health risk for infants, young children, the elderly, and people with severely-compromised immuystems. We found $E.\ coli$ bacteria, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) identify problems and to correct any problems that were four uring these assessments. During the past year we were required to conduct $\underline{\theta}$ Level 1 assessment(s). During the past year we were required to conduct $\underline{\theta}$ Level 2 assessment(s).	ns. ine on. nd
None	