2014 Consumer Confidence Report

Water System Name: Da	venport Water Treatment Plant Re	oort Date: _J	June 17, 2015
	ality for many constituents as required by state for the period of January 1 - December 31, 2012	U	
Este informe contiene inforentienda bien.	nación muy importante sobre su agua potab	le. Tradúzc	alo ó hable con alguien que lo
Type of water source(s) in us	e: Stream		
Name & location of source(s)	: Stream 1, 4400571-002 San Vincente Cr. S	Stream 2, 440	00571-003 Mill Cr.
Drinking Water Source Asses	sment information: Available through the Co	unty of Santa	Cruz Department of
Environmental Health	Available through the Co	unty of Santa	Cruz Department of
Time and place of regularly s Santa Cruz, CA 95062	cheduled board meetings for public participation	: Each Tue	esday at 701 Ocean Street
For more information, contac	t: John Swenson	Phone: (83	1) 477-3945

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 (USEPA).

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): MCLs for 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: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

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 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 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 California Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, 5, 7, and 8 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 Department 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.

TABLE 1 –	SAMPLING	RESULTS	SHOWING T	HE DETECT	TION 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	12	0	More than 1 sample in a month with a detection		0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i> Stream 1 Stream 2	12 12	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>		0	Human and animal fecal waste
TABLE 2	– SAMPLIN	G RESUL	TS SHOWING	THE DETE	CTION OF	LEAD AND COPPER
Lead and Copper (complete if lead or copper detected in the last sample set)	No. of samples collected	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	10 10-28-2014	0	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	10 10-28-2014	0	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

^{*}Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Reporting Limit	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Nitrate as NO3 Stream 1 Stream 2	10-28- 2014	1.8	1.0	45		Runoff/leaching from natural deposits
Fluoride Stream 1 Stream 2	10-28- 2014	ND ND	0.10	2		Runoff/leaching from natural deposits
Copper Stream 1 Stream 2	10-28- 2014	ND ND	50	1000		Runoff/leaching from natural deposits
Zinc Stream 1 Stream 2	10-28- 2014	ND ND	50	5000		Runoff/leaching from natural deposits
Nitrate +Nitrite as N Stream 1 Stream 2	10-28- 2014	ND 0.42	0.10	10		Runoff/leaching from natural deposits
Arsenic Stream 1 Stream 2	10-28- 2014	ND ND	2.0	10		Runoff/leaching from natural deposits
Barium Stream 1 Stream 2	10-28- 2014	ND ND	100	1000		Runoff/leaching from natural deposits
Boron Stream 1 Stream 2	10-28- 2014	ND ND	100	NA		Runoff/leaching from natural deposits
Cadmium Stream 1 Stream 2	10-28- 2014	ND ND	1.0	5		Runoff/leaching from natural deposits
Chromium Stream 1 Stream 2	10-28- 2014	ND ND	1.0	50		Runoff/leaching from natural deposits
Cyanide (total) Stream 1 Stream 2	10-28- 2014	ND ND	100	200		Runoff/leaching from natural deposits
Lead Stream 1 Stream 2	10-28- 2014	ND ND	5.0	15		Runoff/leaching from natural deposits
Mercury Stream 1 Stream 2	10-28- 2014	ND ND	1.0	2		Runoff/leaching from natural deposits
Selenium Stream 1 Stream 2	10-28- 2014	ND ND	5.0	50		Runoff/leaching from natural deposits
Silver Stream 1 Stream 2	10-28- 2014	ND ND	10	100		Runoff/leaching from natural deposits
MBAS (Surfactants) Stream 1 Stream 2	10-28- 2014	ND ND	0.025	0.5		Runoff/leaching from natural deposits

Aluminum Stream 1 Stream 2	10-28- 2014	ND 370	50	1000		Runoff/leaching from natural deposits
Antimony Stream 1 Stream 2	10-28- 2014	ND ND	6.0	6		Runoff/leaching from natural deposits
Beryllium Stream 1 Stream 2	10-28- 2014	ND ND	1.0	4		Runoff/leaching from natural deposits
Nickel Stream 1 Stream 2	10-28- 2014	ND ND	10	100		Runoff/leaching from natural deposits
Thallium Stream 1 Stream 2	10-28- 2014	ND ND	1.0	2		Runoff/leaching from natural deposits
Nitrate as N Stream 1 Stream 2	10-28- 2014	ND ND	0.10	1		Runoff/leaching from natural deposits
Average Chlorine Residual (mg/L)	1-1-2014 through 12-31- 2014	3.263	NA	NA	NA	Drinking water
TABLE 5 – DETEC	CTION OF	CONTAMI	NANTS WITI	I A <u>SECO</u>	NDARY DR	INKING WATER STANDARD
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Perchlorate (ug/L) Stream 1 Stream 2	10-28- 2014	ND ND	NA NA	6 6	2.0 2.0	Perchlorate is an inorganic chemical used in rocket propellant, fireworks, flares, matches, and a variety of industries. It usually gets into drinking water as a result
						of environmental contamination from historic aerospace or other industrial operations that used or use, store or dispose of perchlorate and its salts
Turbidity (units) Raw Filtered	1-1-2014 Through 12-31- 2014	0.653 0.037	NA NA			of environmental contamination from historic aerospace or other industrial operations that used or use, store or
Raw	Through 12-31-			2200 2200	1.0 1.0	of environmental contamination from historic aerospace or other industrial operations that used or use, store or dispose of perchlorate and its salts
Raw Filtered Specific Conductance (umhos/cm) Stream 1	Through 12-31- 2014 4-30-2013	0.037	NA NA			of environmental contamination from historic aerospace or other industrial operations that used or use, store or dispose of perchlorate and its salts Soil runoff Substances that form ions when in water,
Raw Filtered Specific Conductance (umhos/cm) Stream 1 Stream 2 Chloride (ppm) Stream 1	Through 12-31- 2014 4-30-2013	0.037	NA NA			of environmental contamination from historic aerospace or other industrial operations that used or use, store or dispose of perchlorate and its salts Soil runoff Substances that form ions when in water, seawater influence Runoff/leaching from natural deposits,
Raw Filtered Specific Conductance (umhos/cm) Stream 1 Stream 2 Chloride (ppm) Stream 1 Stream2 Sulfate (ppm) Stream 1	Through 12-31- 2014 4-30-2013 4-30-2013	0.037 170 160	NA NA	2200	1.0	of environmental contamination from historic aerospace or other industrial operations that used or use, store or dispose of perchlorate and its salts Soil runoff Substances that form ions when in water, seawater influence Runoff/leaching from natural deposits, seawater influence Runoff/leaching from natural deposits, seawater influence

^{*}Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

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 USEPA'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. 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).

Lead-Specific Language for Community Water Systems: 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. <u>Davenport Water Treatment Plant</u> 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/safewater/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	Health Effects Language		

For Water Systems Providing Ground Water as a Source of Drinking Water

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

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

SPECIAL	NOTICE OF FECAL IND	ICATOR-POSITIVE GI	ROUND WATER SOURCE	SAMPLE
	SPECIAL NOTICE FOR	UNCORRECTED SIGN	IFICANT DEFICIENCIES	
	VIOLA	TION OF GROUND WA	ATER TT	
TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
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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)	Membrane Filtration			
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 to0.040 NTU in 95% of measurements in a month. 2 – Not exceed0.1 NTU for more than eight consecutive hours. 3 – Not exceed10 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	0			

Summary Information for Violation of a Surface Water TT

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

⁽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.

 $[*] Any \ violation \ of \ a \ TT \ is \ marked \ with \ an \ asterisk. \ Additional \ information \ regarding \ the \ violation \ is \ provided \ below.$

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Sumi	mary Information fo	or Operating Under	a Variance or Exem	ption