2021 Consumer Confidence Report

Water System Name:	High Desert State Prison Public Water	System Repo	rt Date: June, 2022
	lity for many constituents as required by state of January 1 to December 31, 2021 and may in		•
	mación muy importante sobre su agua pa 750 Rice Canyon Rd., Susanville, CA 961		9
	l水的重要讯息。请用以下地址和电话取 Rice Canyon Rd., Susanville, CA 96130,	_	rison Public Water System
• •	lalaman ng mahalagang impormasyon tu te Prison Public Water System, 475-750 l ngan sa wikang Tagalog.	• •	
•	quan trọng về nước uống của bạn. Xin v e Prison Public Water System, 475-750 R g Việt.		
•	siab lus tseem ceeb txog koj cov dej haus. e Canyon Rd., Susanville, CA 96130, (530		
Type of water source(s) in	use: Groundwater		
	of source(s): California Correction cluded within this report because it has be the Prison (HDSP) is served by wells 215, 2	een non-operational for a	ed by wells 5, 6, 7, and 8. all of year 2021.
considered vulnerable to wa petroleum processing/storag corridors - none of which ha considered vulnerable to sev	has performed an assessment of our dring ter supply wells, NPDS/WDR permitted one, wastewater treatment plants, and state have been associated with any detected conver collection systems, irrigated crops, agos, and dry cleaners of which have been as	nking water sources. Our discharges, automobile g highway and railroad tra taminants. However, our tricultural drainage, graz	gas stations, chemical/ unsportation r water sources are ing, junk/scrap/
Time and place of regular	y scheduled board meetings for public	participation:	N/A
For more information, con	tact: Fred Whitlock	Phone:	(530) 251-5100 ext. 6601

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).

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.

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.

Variances and Exemptions: State Board permission 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 ($\mu g/L$)

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)

Sources of Drinking Water and Contaminants That May Be Present in Source Water

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 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, agricultural application, and septic systems.
- · Radioactive contaminants that can be naturally-occurring or be the result of oil and gas production and mining activities.

Regulation of Drinking Water and Bottled Water Quality

In order to ensure that tap water is safe to drink, the U.S. EPA and the State Water Resources Control Board (State Board) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. State Board regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

About Your Drinking Water Quality

Drinking Water Contaminants Detected

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 - S	SAMPLING RESULT	S SHOWING THE D	ETECTION OF COL	IFORM B	ACTERIA
Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of Months in Violation	in MCL		Typical Source of Bacteria
Total Coliform or <i>E.</i> coli (state Total Coliform Rule)	(In a month) 0	0	1 positive monthly sample	0	Naturally present in the environment.
Fecal Coliform or E.coli (state Total Coliform Rule)	(In a year) 0	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.		Human and animal fecal matter.
E. coli (federal Revised Total Coliform Rule)	(In a year)	0	(a) (b)	0	Human and animal fecal waste

(a) One or more positive monthly samples is a violation of the MCL. (b) 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* . *E. coli* 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 serverely compromised immune systems.

TABLE 2	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	90th Percentile Level Detected	No. of Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Sources of Contaminant	
Lead (ppb)	Sept. 2021	20	ND	0	15	0.2	0	Internal corrosion of household water plumbing systems; discharge from industrial manufacturers; erosion of natural deposits	
Copper (ppb)	Sept. 2021	20	128	0	1300	300	0	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	

	TABLE 3 - SAMPLING RESULTS FOR SODIUM AND HARNESS								
Chemical or Constituent (and reporting units)		Sample Date	Level Detected (average)	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant		
Sodium	CCC	2014	59	31.9 to 113	None	None	Salt present in the water and is generally naturally occurring		
(ppm)	HDSP	2018	57.3	44 to 82	None				
Hardness	CCC	2014	45.2	29 to 71.6			Sum of polyvalent cations present in the water,		
(ppm)	HDSP	2018	18.3	7.5 to 28.2	None	None	generally magnesium and calcium, and are usually naturally occurring		

TABLE 4 - DETECTION OF CONTAMINANTS WITH A <u>PRIMARY</u> DRINKING WATER STANDARD									
Chemical or Constituent (and reporting units)		Sample Date	Level Detected (Average)	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant		
Augonia	CCC	2021	9.00	7.67 to 8.67* *	10	0.004	Erosion of natural deposits, runoff from orchards, glass		
Arsenic (ppb)	HDSP	2021	16.08	13.00 to 20.00* *	10	0.004	and electronics waste		
	CCC	2021	0.2	0.2	2	1	Erosion of natural deposits;		
Fluoride (ppm)	HDSP	2018	1.03	.6 to 1.7	2	1	discharge from fertilizer and aluminum factories		
Nitrate (ppm)	CCC	2021	0.7	ND to 1	45	45	Erosion of natural deposits; leaching from septic and		
ivitiate (ppin)	HDSP	2021	0.7	ND to .8	43		sewage; runoff/leaching from fertilizer use		
Gross Alpha (pCi/L)	CCC	2016	1.96	.02 to 3.9	15	0	Erosion of natural deposits		
Gross Aipha (pci/L)	HDSP	2016	3	3	13				
Cis-1,2- dichloroethylene	CCC	2021	7.42*	4 to 11*	_	100	Discharge from industrial chemical factories;		
(Cis-1,2-DCE) (ppb) (well 6)	HDSP	2021	ND	ND	6	100	biodegradation; TCE and PCE groundwater contamination		
Tetrachloroethylene	CCC	2021	8.34*	5.3 to 12.2*		0.05	Discharge from factories,		
(PCE) (ppb) (well 6)	HDSP	2021	ND	ND	5	0.06	dry cleaners, and auto shops (metal degreaser)		
Trichloroethylene	CCC	2021	2.82	1.3 to 4.1			Discharge from metal		
(TCE) (ppb) (well 6)	HDSP	2021	ND	ND	5	1.7	degreasing sites and other factories		

^{*} per quarterly average.

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

TABLE 5 - DETECTION OF CONTAMINANTS WITH A <u>SECONDARY</u> DRINKING WATER STANDARD									
Chemical or Constituent (and reporting units)		Sample Date	1 Detected Range of Detections S		SMCL	PHG (MCLG)	Typical Source of Contaminant		
Chlowido ()	CCC	2014	8.9	4.1 to 14.1	500	None	Runoff/leaching from natural deposits; seawater		
Chloride (ppm)	HDSP	2016	14.13	5.1 to 27	300	None	influence		
Colon (ita)	CCC	2014	2.8	ND to 10	15	None	Naturally occurring organic material		
Color (units)	HDSP	2019	ND	ND	13	None			
Specific Conductance	CCC	2014	325.7	214 to 544	1,600	None	Substances that form ions in water; seawater influence		
(µS/cm)	HDSP	2018	312.7	258 to 396	1,000	None			
Sulfata (CCC	2014	34.2	12.6 to 84.2	500	None	Runoff/leaching from natural deposits; industrial waste		
Sulfate (ppm)	HDSP	2017	32.33	15.5 to 55.4	500	None			
Total Dissolved Solids	CCC	2014	247	178 to 375	1,000	None	Runoff/leaching from		
(TDS) (ppm)	HDSP	2017	245	200 to 290	1,000	None	natural deposits		
Turbidity (units)	CCC	2014	1.5	ND to 5.8*	5	None Soil runoff			
Turbidity (units)	HDSP	2019	0.2	0.2	3	None	Son funon		

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

TABLE 6 - DETECTION OF UNREGULATED CONTAMINANTS									
Chemical or Constituent (and reporting units)		Sample Date	Level Detected (Average)	Range of Detections	Notification Level	Health Effects Language			
Chloring ()	CCC	2021	0.76	.25 to 1.47	4	Increased risk of irritation to respiratory system, eyes			
Chlorine (ppm)	HDSP	2021	0.68	.18 to 1.27	4	and skin			
Trihalomethanes (ppb)	CCC	2021	8	ND to 8	80	Increased problems with liver, kidneys, central			
Timalomethanes (ppb)	HDSP	2021	8	ND to 4	80	nervous system. Increased risk of cancer			
Haloacetic Acids (ppb)	CCC	2021	1	ND to 3	60	Increased risk of cancer			
	HDSP	2021	1	ND to 1	00	increased risk of cancer			

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. High Desert State Prison Public Water System 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.

Arsenic-Specific Language: While your drinking water meets the federal and state standards for arsenic, it does contain low levels of arsenic. The arsenic standard balances the current understanding of arsenic's possible health effects against the cost of removing arsenic from drinking water. The U.S. Environmental Protection Agency continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and cirulatory problems.

Total Coliform Bacteria(**federal Revised Total Coliform Rule**): 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 did not find coliform bacteria during this year of testing.

TABLE 7 - SAMPLING RESULTS SHOWING FECAL INDICATOR-POSITIVE GROUNDWATER SOURCE SAMPLES								
Microbiological Contaminants	Sample Dates Sample							
E. Coli	0	Weekly	0	0	Human and animal fecal waste			
Enterococci	0	N/A	TT	N/A	Human and animal fecal waste			
Coliphage	0	N/A	TT	N/A	Human and animal fecal waste			

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

VIOLATION (OF AN MCL, MRDL, AL, TT, O			QUIREMENT
Violation	Explanation	Duration	Actions Taken to Correct	Health Effects
Arsenic	For 2021, HDSP's wells 215, 217, and 218 untreated water sample results per quarter for arsenic were in the range of 13.00 to 20.00 ppb with an annual average of 16.08 ppb. However, after treatment, water sample results per quarter were in the range of 5.33 to 7.75 ppb with an annual average of 7.08 ppb and thus less than the 10 ppb MCL for arsenic. In December, HDSP treated sample result showed 16 ppb - violation of MCL for arsenic.	12 months	Source waters are continuously treated and tested by means of processes approved and regulated by the State Water Resources Control Board (SWRCB) and the Environmental Protection Agency (EPA) to ensure compliance with established regulations. Water samples are submitted to and certified by an independent laboratory testing facility.	Increased risk of skin, bladder, and lung cancer. May also cause skin lesions, anemia, nerve damage, and circulatory problems.
Tetrachloroethylene (PCE)	For 2021, CCC well #6, untreated monthly water sample results averaged for the year 8.34 ppb. However, after treatment, water samples ranged from non-detect to .50 ppb by an independent laboratory test facility.	12 months	Source waters are continuously treated and tested by means of processes approved and regulated by the State Water Resources Control Board (SWRCB) and the Environmental Protection Agency (EPA) to ensure compliance with established regulations. Water samples are submitted to and certified by an independent laboratory testing facility.	Some people who use water containing tetrachloroethylene in excess of the MCL over many years may experience liver problems, and may have an increased risk of getting cancer.
Turbidity	CCC well 8 supplies water that exceeds the drinking water standards for turbidity. The secondary standard for turbidity is based upon aesthetics, not health effects. Because the CCC well water is blended in a common pipe and within storage reservoirs, the turbidity in the CCC distribution system is closer to the average than the maximum level detected.	2 months	Well 8 water is blended with other source waters within a common pipe and within reservoirs. The result is a reduction in finished water turbidity within the water distribution system meeting required MCL standards.	Turbidity has no health effects, but can interfere with disinfection and provide a medium for microbial growth.
Cis-1,2- dichloroethylene (DCE)	For 2021, CCC well #6 untreated monthly water sample results averaged for the year 7.42 ppb. However, after treatment water sample results ranged from nondetect to .90 ppb with an annual average of .75 ppb and thus less than the MCL of 6 ppb. as tested and certified by an independent laboratory test facility.	12 months	Source waters are continuously treated and tested by means of processes approved and regulated by the State Water Resources Control Board (SWRCB) and the Environmental Protection Agency (EPA) to ensure compliance with established regulations. Water samples are submitted to and certified by an independent laboratory testing facility.	Some people who use water containing cis-1,2-dichloroethylene in excess of the MCL over many years may experience liver problems.