2016 Consumer Confidence Report

Water System Name: Stovepipe Wells Water System Report Date: 07/01/2017

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2016 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

Type of water source(s) in use: The Stovepipe Wells Community water supply is produced from a well.

Name & general location of source(s): The Stovepipe Wells well and RO Plant is located approximately a third of a mile from the Stovepipe Wells concession.

Drinking Water Source Assessment information: A source water assessment was conducted for the sources of the Death Valley National Park public water systems in May 2002. Well 1 is not considered vulnerable to any potentially contaminating activities at this time. The detection of fluoride is considered naturally occurring. Reverse osmosis treatment is provided for this. A copy of the complete assessment may be viewed at the Death Valley National Park office or requested from the State Water Resources Control Board, Division of Drinking Water at (909) 383-4328 or 464 West 4th Street, Suite 437, San Bernardino, CA 92401.

The water is considered moderately mineralized consisting of sodium, calcium and magnesium, salts and bicarbonate, sulfates, and chloride. The water is considered high silica water in which amorphous silica and magnesium silicate deposits could create serious problems by fouling surfaces of water handling equipment. This type of silica scale is very tenacious and difficult to remove. Reverse Osmosis is used to treat this water and a very high quality of drinking water is produced. Specific water quality data relating to system water supplies can be found below.

Time and place of regularly scheduled board meetings for public participation: Please call Tom Buck for an appointment at (760) 786-3264 or email: tom buck@nps.gov

For more information, contact: Tom Buck Phone: (760) 786-3264

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

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: 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

(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.

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 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 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.

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 mo.) <u>0</u>	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		Human and animal fecal waste		
E. coli (federal Revised Total Coliform Rule)	(from 4/1/16- 12/31/16) 0	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	Typical Source of Contaminant	
Lead (ppb)	7/6/16	5	11.55	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits	
Copper (ppm)	7/6/16	5	0.0925	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
	TABLE 3	- SAMPL	ING RES	ULTS FOR	SODIUM A	AND HARDI	NESS	
Chemical or Constituent (and reporting units)	Sample Date	Level Detecto		Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant	
Sodium (ppm)	4/8/2014	670		N/A	none	none	Salt present in the water and is	
Hardness (ppm)	4/8/2014	750		N/A	none none		generally naturally occurring Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring	
TABLE 4 – DET	ECTION O	F CONTA	MINANT	S WITH A <u>l</u>	PRIMARY	DRINKING	WATER STANDARD	
Chemical or Constituent (and reporting units)	Sample Date	Level Detecto		Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant	
Turbidity (NTU)	4/8/2014	3.4		N/A	5	N/A	Soil runoff	
Gross Alpha (PCI/L)	4/25/14	2.4		N/A	15	N/A	Erosion of natural deposits	
Fluoride (ppm)	4/8/14	1.6		N/A	2.0	N/A	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	
TTHMs (Total Trihalomethanes) (ppb)	7/13/16	32.1		28.2-32.1	80	N/A	By-product of drinking water disinfection	
Haloacetic Acids (ppb)	7/13/16	11.7		9.4-11.7	60	N/A	By-product of drinking water disinfection	
TABLE 5 – DETE	CTION OF	CONTAN	MINANTS	WITH A SE	CONDAR	Y DRINKIN	IG WATER STANDARD	
Chemical or Constituent (and reporting units)	Sample Date	Level Detecto		Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant	
Iron (ppb)	4/8/14	390+		N/A	300	N/A	Leaching from natural deposits; industrial wastes	
Odor—Threshold (Units)	4/8/14	1		N/A	3	N/A	Naturally-occurring organic materials	
Turbidity (NTU)	4/8/14	3.4+		N/A	5	N/A	Soil runoff	
Total Dissolved Solids (TDS) (ppm)	4/8/14	2900+	+	N/A	1000	N/A	Runoff/leaching from natural deposits	
Specific Conductance (µS/cm)	4/8/14	4900 ⁺	+	N/A	1600	N/A	Substances that form ions when in water; seawater influence	
Chloride (ppm)	4/8/14	1200 ⁺	+	N/A	500	N/A	Runoff/leaching from natural deposits; seawater influence	

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.

Sulfate (ppm)	4/8/14	380	N/A	500	N/A	Runoff/leaching from natural deposits; industrial wastes		
⁺ The values listed for Iron, Turbidity, Total Dissolved Solids, Specific Conductance, Chloride and Boron are for raw values only and do not represent what is present in the drinking water after processing by the reverse osmosis plant.								
TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS								
Chemical or Constituent (and reporting units) Sample Date Detected Range of Detections Notification Level Health Effects Language								
Boron (ppm)	4/8/14	6.6+	N/A		1	The babies of some pregnant		

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. [Stovepipe Wells Community 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 (1-800-426-4701) 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	Violation Explanation Duration Actions Taken to Correct the Violation Language						
None							

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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 [MRDL] PHG (MCLG) [MRDLG] Typical Source of Contaminant							
E. coli	0 (In the year)		0	(0)	Human and animal fecal waste		
Enterococci	0 (In the year)		TT	n/a	Human and animal fecal waste		
Coliphage	0 (In the year)		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	OICATOR-POSITIVE	GROUND WATER SOURCE	SAMPLE
None detected				
	SDECIAL NOTICE FOD	IINCODDECTED SIC	NIFICANT DEFICIENCIES	
None detected	SI ECIAL NOTICE FOR	UNCORRECTED STO	THE CAN'T DEFICIENCES	
	VIOLA	TION OF GROUND V	VATER TT	
TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
None				