2017 Consumer Confidence Report

Water System Name: **SCE Bishop Creek Plant 4 #1400078** Report Date: July 1, 2018

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, 2017 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: Groundwater well.

Name & general location of source(s): Well 01 S is located at the Bishop Creek Plant 4 facility.

Drinking Water Source Assessment information: The source assessment was updated in March 2012. The source is considered vulnerable to the following activities associated with a detection in the water supply: machine shops and utility stations-maintenance areas. The source is also considered vulnerable to the following activities not associated with a detection in the water supply: sewer collection systems and septic systems-low density. The complete assessment is available for review at the Inyo County Environmental Health Services, 207 W. South Street, Bishop, or call (760) 873-7865.

Time and place of regularly scheduled board meetings for public participation: Not applicable.

For more information, contact: Violet Calero Phone: (626) 407-1991

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.

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 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)

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

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 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)	6 (In the year)	3	1 positive monthly sample	0	Naturally present in the environment
Fecal Coliform or *E. coli* (state Total Coliform Rule)	0 (In the year)	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or *E. coli* positive	0	Human and animal fecal waste
E. coli (federal Revised Total Coliform Rule)	0 (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**	**90th Percentile Level Detected**	**No. Sites Exceeding AL**	**AL**	**PHG**	**No. of Schools Requesting Lead Sampling**	**Typical Source of Contaminant**
Lead (ppb)	7/28/16	5	3.55	0	15	0.2	Not applicable	Internal corrosion of household water plumbing systems; discharges from

								industrial manufacturers; erosion of natural deposits
Copper (ppm)	7/28/16	5	0.270	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)	12/9/14	8.8	n/a	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	12/9/14	64	n/a	none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

TABLE 4 – DETECTION OF CONTAMINANTS 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**
Fluoride (ppm)	12/9/14	0.14	n/a	2.0	1	Erosion of natural deposits
Gross Alpha (pCi/L)	7/28/16	ND (<3)	n/a	15	(0)	Erosion of natural deposits
Nitrate, as N (ppm)	12/30/16	ND (<0.4)	n/a	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Tetrachloroethylene (PCE) (ppb)	2/15/16, 5/17/16, 7/28/16, 12/21/16	ND (<0.5)	n/a	5	.06	Discharge from factories, dry cleaners, and auto shops (metal degreaser)
Uranium (pCi/L)	7/28/16	3.9	n/a	20	0.43	Erosion of natural deposits

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD

Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**PHG (MCLG)**	**Typical Source of Contaminant**
Bicarbonate Alkalinity (ppm)	12/9/14	90	n/a	n/a	n/a	Erosion of natural deposits
Calcium (ppm)	12/9/14	20.2	n/a	n/a	n/a	Erosion of natural deposits
Chloride (ppm)	12/9/14	1.0	n/a	500	n/a	Erosion of natural deposits
Color (units)	6/8/11	5.0	n/a	15	n/a	Naturally-occurring organic materials
Copper (ppm)	7/28/16	0.157 (average)	(0.064-0.270)	1.0	n/a	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Total Hardness as CaCO3 (ppm)	12/9/14	64	n/a	n/a	n/a	Naturally occurring cations (characteristically magnesium and calcium)
Magnesium (ppm)	12/9/14	3.16	n/a	50	n/a	Leaching from natural deposits
Odor (units)	12/9/14	1.0	n/a	3	n/a	Naturally-occurring organic materials
pH (pH units)	12/9/14	6.84	n/a	6.5 – 8.5	n/a	

Sodium (ppm)	12/9/14	8.8	n/a	n/a	n/a	Refers to the salt present in the water and is generally naturally occurring
Specific Conductance (uS/cm)	12/9/14	160	n/a	1600	n/a	Substances that form ions when in water
Sulfate (ppm)	12/9/14	7.4	n/a	500	n/a	Erosion of natural deposits
Total Dissolved Solids (ppm)	12/9/14	99	n/a	1000	n/a	Erosion of natural deposits
Zinc (ppm)	12/9/14	0.190	n/a	5.0	n/a	Runoff/leaching from natural deposits; industrial wastes

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**Notification Level**	**Typical Source of Contaminant**
Alkalinity as $CaCO_3$ (ppm)	12/9/16	74	n/a	n/a	Erosion 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 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. Southern California Edison 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	**Explanation**	**Duration**	**Actions Taken to Correct the Violation**	**Health Effects Language**
Revised Total Coliform Rule (RTCR)	Presence of coliform bacteria above the drinking water standard	July 1 to July 31	Repeat sample and distribution system samples collected.	Total coliform bacteria are generally not harmful themselves. Coliform bacteria which are naturally present in the environment and are used

				as an indicator that other, potential-harmful, bacteria may be present.
Revised Total Coliform Rule (RTCR)	Presence of coliform bacteria above the drinking water standard	November 14, 2017, to January 2018	System chlorination disinfection and resampling was conducted.	Total coliform bacteria are generally not harmful themselves. Coliform bacteria which are naturally present in the environment and are used as an indicator that other, potential-harmful, bacteria may be present.

Customers of SCE Bishop Creek Plant 4 – System# 1400078 were notified on November 8, 2017, of the presence of coliform bacteria above the drinking water standard. Customers were informed that a system chlorination disinfection and resampling would be conducted.

Special chlorination was activated from November 8 to November 28, 2017. Three samples were taken to test for the presence of coliform bacteria in January 2018 after pre-analysis revealed a zero-chlorine residual. No samples showed the presence of total coliform bacteria. Therefore, we are pleased to report that the problem was corrected.

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 Contaminant**
E. coli	0	1/4/17 – 12/12/17	0	(0)	Human and animal fecal waste
Enterococci	0		TT	n/a	Human and animal fecal waste
Coliphage	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**

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 two Level 1 assessments. The two Level 1 assessment(s) were completed. In addition, we were required to take two corrective actions and we completed the corrective actions by resampling and chlorinating the system.