

## 2022 Consumer Confidence

### Report Water System Information

Water System Name: [City of California City](#)

Report Date: [August 25, 2023](#)

Type of Water Source(s) in Use: [Six Ground Water Wells and One Supplier Water Source \(AVEK\)](#)

Name and General Location of Source(s): [Well #2, Well #3, Well#10, Well#14, Well#15A, and Well#16 are all located in the first community within a three-mile radius from City Hall 21000 Hacienda Blvd; California City, CA 93505. The water source for AVEK is at the NW corner of California City Boulevard and Randsburg Mojave Road.](#)

Drinking Water Source Assessment Information: [Available at California City's City Hall 21000 Hacienda Blvd; California City, CA 93505.](#)

Time and Place of Regularly Scheduled Board Meetings for Public Participation: [Second and Fourth Tuesday of every month at 6:00PM at California City's City Hall 21000 Hacienda Blvd; California City, CA 93505.](#)

For More Information, Contact: [Joe Barragan Director of Public Works at \(760\) 373-7162](#)

### About This Report

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 to December 31, 2020 and may include earlier monitoring data.

### Importance of This Report Statement in Five Non-English Languages (Spanish, Mandarin, Tagalog, Vietnamese, and Hmong)

Language in Spanish: Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse [City of California City](#) a [21000 Hacienda Blvd; California City, CA 93505 \(760\) 373-7162](#) para asistirlo en español.

Language in Mandarin: 这份报告含有关于您的饮用水的重要讯息。请用以下地址和电话联系 [City of California City](#) 以获得中文的帮助: [21000 Hacienda Blvd; California City, CA 93505 \(760\) 373-7162](#).

Language in Tagalog: Ang pag-uulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong inuming tubig. Mangyaring makipag-ugnayan sa [City of California City](#) o tumawag sa [21000 Hacienda Blvd; California City, CA 93505 \(760\) 373-7162](#) para matulungan sa wikang Tagalog.

Language in Vietnamese: Báo cáo này chứa thông tin quan trọng về nước uống của bạn. Xin vui lòng liên hệ [City of California City](#) tại [21000 Hacienda Blvd; California City, CA 93505 \(760\) 373-7162](#) để được hỗ trợ giúp bằng tiếng Việt.

Language in Hmong: Tsab ntawv no muaj cov ntsiab lus tseem ceeb txog koj cov dej haus. Thov hu rau [City of California City](#) ntawm [21000 Hacienda Blvd; California City, CA 93505 \(760\) 373-7162](#) rau kev pab hauv lus Askiv.

## Terms Used in This Report

Term	Definition
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 <i>E. coli</i> MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
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).
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.
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.
Regulatory Action Level (AL)	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
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.
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.
ND	Not detectable at testing limit.
ppm	parts per million or milligrams per liter (mg/L)
ppb	parts per million or milligrams per liter (mg/L)

Term	Definition
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 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.

## 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 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.

## About Your Drinking Water Quality

### Drinking Water Contaminants Detected

Tables 1, 2, 3, 4, 5, 6, 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 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**

Complete if bacteria are detected.

Microbiological Contaminants	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) <u>0</u>	<u>0</u>	1 positive monthly sample <sup>(a)</sup>	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i> (State Total Coliform Rule)	(In the year) <u>0</u>	<u>0</u>	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	None	Human and animal fecal waste
<i>E. coli</i> (Federal Revised Total Coliform Rule)	(In the year) <u>0</u>	<u>0</u>	(b)	0	Human and animal fecal waste

(a) Two 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*.

**Table 2. Sampling Results Showing the Detection of Lead and Copper**

Complete if lead or copper is detected in the last sample set.

Lead and Copper	Sample Date	No. of Samples Collected	90 <sup>th</sup> Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	<u>2020</u>	<u>20</u>	<u>0.64</u>	<u>0</u>	15	0.2	<u>5</u>	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	<u>2020</u>	<u>20</u>	<u>0.11</u>	<u>0</u>	1.3	0.3	N/A	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)	<a href="#">2020</a>	<a href="#">136</a>	<a href="#">120-150</a>	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	<a href="#">2020</a>	<a href="#">93.2</a>	<a href="#">76-110</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	PHG (MCLG)	Typical Source of Contaminant
<a href="#">Arsenic (ppb)</a>	<a href="#">2020</a>	<a href="#">5.9</a>	<a href="#">4.1-7.4</a>	<a href="#">10</a>	<a href="#">0.004</a>	<a href="#">Erosion of natural deposits; run off from orchards; glass and electronics production wastes.</a>
<a href="#">Barium (ppm)</a>	<a href="#">2020</a>	<a href="#">0.026</a>	<a href="#">0.022 - 0.032</a>	<a href="#">1</a>	<a href="#">2</a>	<a href="#">Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits</a>
<a href="#">Fluoride (ppm)</a>	<a href="#">2020</a>	<a href="#">1.26</a>	<a href="#">0.97 - 1.6</a>	<a href="#">2</a>	<a href="#">1</a>	<a href="#">Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories</a>
<a href="#">Selenium (ppb)</a>	<a href="#">2020</a>	<a href="#">0.0</a>	<a href="#">0</a>	<a href="#">50</a>	<a href="#">30</a>	<a href="#">Discharge from petroleum, glass and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers;</a>

						<u>runoff from livestock lots (feed additives)</u>
<u>Nitrate (ppm)</u>	<u>2022</u>	<u>0.48</u>	<u>0.46- .50</u>	<u>10</u>	<u>10</u>	<u>Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits</u>

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	Typical Source of Contaminant
<u>Aluminum (ppm)</u>	<u>2020</u>	<u>0</u>	<u>0.0 - 0.0</u>	<u>1</u>	<u>0.6</u>	<u>Erosion of natural deposits; residual from some surface water treatment process</u>
<u>Bicarbonate (ppm)</u>	<u>2020</u>	<u>206</u>	<u>190 - 230</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>
<u>Calcium (ppm)</u>	<u>2020</u>	<u>25.60</u>	<u>21- 31</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>
<u>Alkalinity (ppm)</u>	<u>2020</u>	<u>166</u>	<u>150-180</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>
<u>Chloride (ppm)</u>	<u>2020</u>	<u>82.6</u>	<u>67 - 110</u>	<u>500</u>	<u>n/a</u>	<u>Runoff/leaching from natural deposits; seawater influence</u>
<u>Foaming Agents [MBAS](ppb)</u>	<u>2020</u>	<u>0</u>	<u>0</u>	<u>500</u>	<u>n/a</u>	<u>Municipal and industrial waste discharges</u>
<u>Iron (ppb)</u>	<u>2020</u>	<u>15.2</u>	<u>0 - 76</u>	<u>300</u>	<u>n/a</u>	<u>Leaching from natural deposits; industrial wastes</u>
<u>Magnesium (ppb)</u>	<u>2020</u>	<u>.705</u>	<u>6-8.9</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>
<u>Manganese (ppb)</u>	<u>2020</u>	<u>0</u>	<u>0</u>	<u>50</u>	<u>n/a</u>	<u>Leaching from natural deposits</u>
<u>PH (pH Unit)</u>	<u>2020</u>	<u>7.954</u>	<u>7.9 - 8</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>
<u>Specific Conductance (uS/cm)</u>	<u>2020</u>	<u>792</u>	<u>705 – 891</u>	<u>1600</u>	<u>n/a</u>	<u>Substance that form ions when in water; seawater influence</u>
<u>Sulfate (ppm)</u>	<u>2020</u>	<u>93</u>	<u>83 - 100</u>	<u>500</u>	<u>n/a</u>	<u>Runoff/leaching from natural deposits; industrial wastes</u>

<u>Total Dissolved Solids [TDS] (ppm)</u>	<u>2020</u>	<u>560</u>	<u>530 - 590</u>	<u>1,000</u>	<u>n/a</u>	<u>Runoff/leaching from natural deposits</u>
<u>Turbidity (NTU)</u>	<u>2020</u>	<u>0.25</u>	<u>0.12 – 0.52</u>	<u>TT</u>	<u>n/a</u>	<u>Soil runoff</u>
<u>Potassium (ppm)</u>	<u>2020</u>	<u>2.5</u>	<u>2.3 - 2.6</u>	<u>n/a</u>	<u>n/a</u>	<u>n/a</u>
<u>Zinc (ppm)</u>	<u>2020</u>	<u>0.1</u>	<u>0 - 50</u>	<u>5.0</u>	<u>n/a</u>	<u>Runoff/leaching from natural deposits; industrial wastes</u>

Table 6. Detection of Unregulated Contaminants

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
<u>Chromium (ppb)</u>	<u>2020</u>	<u>3.833</u>	<u>0-12</u>	<u>50</u>	<u>Some people who use water containing chromium in excess of MCL over many years may experience allergic dermatitis</u>

### 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. [Enter Water System's Name] 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>.

Additional Special Language for Nitrate, Arsenic, Lead, Radon, and *Cryptosporidium*: [Enter Additional Information Described in Instructions for SWS CCR Document]

Federal Revised Total Coliform Rule (RTCR): [Enter Additional Information Described in Instructions for SWS CCR Document]

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

**Table 7. Violation of a MCL, MRDL, AL, TT or Monitoring Reporting Requirement**

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
<a href="#">None</a>	<a href="#">N/A</a>	<a href="#">N/A</a>	<a href="#">N/A</a>	<a href="#">N/A</a>
<a href="#">None</a>	<a href="#">N/A</a>	<a href="#">N/A</a>	<a href="#">N/A</a>	<a href="#">N/A</a>

### For Water Systems Providing Groundwater as a Source of Drinking Water

**Table 8. 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
<a href="#">E. coli</a>	<a href="#">0</a>	<a href="#">2020</a>	<a href="#">0</a>	<a href="#">(0)</a>	<a href="#">Human and animal fecal waste</a>
<a href="#">Enterococci</a>	<a href="#">0</a>	<a href="#">2020</a>	<a href="#">TT</a>	<a href="#">N/A</a>	<a href="#">Human and animal fecal waste</a>
<a href="#">Coliphage</a>	<a href="#">0</a>	<a href="#">2020</a>	<a href="#">TT</a>	<a href="#">N/A</a>	<a href="#">Human and animal fecal waste</a>

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

Special Notice of Fecal Indicator-Positive Groundwater Source Sample: [None](#)

Special Notice for Uncorrected Significant Deficiencies: [None](#)



**Table 9. Violation of Groundwater TT**

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
<a href="#">None</a>	<a href="#">N/A</a>	<a href="#">N/A</a>	<a href="#">N/A</a>	<a href="#">N/A</a>
<a href="#">None</a>	<a href="#">N/A</a>	<a href="#">N/A</a>	<a href="#">N/A</a>	<a href="#">N/A</a>

**For Systems Providing Surface Water as a Source of Drinking Water****Table 10. Sampling Results Showing Treatment of Surface Water Sources**

Treatment Technique <sup>(a)</sup> (Type of approved filtration technology used)	<a href="#">N/A</a>
Turbidity Performance Standards <sup>(b)</sup> (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 – Be less than or equal to <a href="#">N/A</a> NTU in 95% of measurements in a month. 2 – Not exceed <a href="#">N/A</a> NTU for more than eight consecutive hours. 3 – Not exceed <a href="#">N/A</a> NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	<a href="#">N/A</a>
Highest single turbidity measurement during the year	<a href="#">N/A</a>
Number of violations of any surface water treatment requirements	<a href="#">N/A</a>

(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 Violation of a Surface Water TT****Table 11. Violation of Surface Water TT**

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
<a href="#">None</a>	<a href="#">N/A</a>	<a href="#">N/A</a>	<a href="#">N/A</a>	<a href="#">N/A</a>
<a href="#">None</a>	<a href="#">N/A</a>	<a href="#">N/A</a>	<a href="#">N/A</a>	<a href="#">N/A</a>

**Summary Information for Operating Under a Variance or Exemption**[N/A](#)

**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**

[N/A](#)

**Level 2 Assessment Requirement Due to an *E. coli* MCL Violation**

[N/A](#)

**Antelope Valley-East Kern Water Agency**  
**2022 Annual Water Quality Report - Kern County System**

The Antelope Valley-East Kern Water Agency provides treated surface water and treated groundwater as our sources of drinking water.

Treatment technique: Conventional

EPA Turbidity Performance Standards: Turbidity of the filtered water must:

1. Be less than or equal to 0.30 NTU in 95% of measurements in a month.
2. Not exceed 1 NTU at any time.

Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1: **100%**

Highest single turbidity measurement during the year: **0.19 NTU**

Percentage of samples < 0.30 NTU: **100%**

The number of violations of any surface water treatment requirements: **NONE**

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.

The Antelope Valley-East Kern Water Agency also provides chlorinated groundwater as an alternative source of drinking water.

Treatment technique: Chlorination

EPA Groundwater Rule: AVEK meets the requirements of the Groundwater Rule by providing a minimum of 4-log reduction of viruses by continuously providing a minimum free chlorine residual of 0.5 mg/L leaving the clearwell.

Lowest single free chlorine residual measurement during the year: **0.89**

Number of violations of the Groundwater Rule: **NONE**

**MICROBIOLOGICAL CONTAMINANTS**

<u>Type of Sample(s)</u>	<u>Parameter</u>	<u>Sampling Frequency</u>	<u>MCL</u>	<u>No. of Months in Violation</u>	<u>System Results</u>	
					<u>Range</u>	<u>Average</u>
Distribution	Total Coliform Bacteria	56 - 70 / mo	5% positive	None	0%	0%
Distribution	E. coli	56 - 70 / mo	1 pos. with 2 TC pos.	None	0%	0%

**INORGANIC CONTAMINANTS**

					<b>RESULTS</b>							
					Rosamond Plant				Water Bank			
<u>Parameter</u>	<u>Units</u>	<u>MCL</u>	<u>DLR</u>	<u>PHG</u>	<u>Plant Effluent (CWR)</u>		<u>Raw Influent (Sources)</u>		<u>Effluent (CWR)</u>		<u>Wells</u>	
					<u>Range</u>	<u>Average</u>	<u>Range</u>	<u>Average</u>	<u>Range</u>	<u>Average</u>	<u>Range</u>	<u>Average</u>
Aluminum	µg/L	1000	50	600	93-250	130	ND	ND				
Antimony	µg/L	6	6	1		ND	ND	ND				
Arsenic	µg/L	10	2	0.004		3.6	3.2-8.1	5.0	2.5-7.3	5.5	2.2-12	5.2
Barium	µg/L	1000	100	2000		58	30-58	44				
Beryllium	µg/L	4	1	1		ND	ND	ND				
Cadmium	µg/L	5	1	0.04		ND	ND	ND				
Chromium (Total)	µg/L	50	10			5.1	5.1-15	11				
Chromium (Hexavalent)	µg/L	*	1	0.02		5.8	5.4-14	8.6				
Cyanide	µg/L	150	100	150		ND	ND	ND				
Fluoride	mg/L	2	0.1	1		0.28	0.29-0.36	0.32				
Mercury	µg/L	2	1	1.2		ND	ND	ND				
Nickel	µg/L	100	10	12		ND	ND	ND				
Nitrate (as N)	mg/L	10	0.4	10		2.5	1.2-2.5	1.9			1.2-4.5	2.5
Nitrite (as N)	mg/L	1	0.4	1		ND	ND	ND			ND	ND
Nitrate+Nitrite (as N)	mg/L	10		10		2.5	ND-2.5	0.83			1.5-3.4	2.2
Perchlorate	µg/L	6	2	1		ND	ND	ND			ND	ND
Selenium	µg/L	50	5	30		ND	ND	ND				
Thallium	µg/L	2	1	0.1		ND	ND	ND				

\*There is currently no MCL for hexavalent chromium. The previous MCL of 0.010 mg/L was withdrawn on September 11, 2017.

**Antelope Valley-East Kern Water Agency**  
**2022 Annual Water Quality Report - Kern County System**

**GENERAL PHYSICAL AND SECONDARY STANDARDS**

Parameter	Units	MCL	DLR	<b>RESULTS</b>							
				Rosamond Plant		Water Bank		Effluent (CWR)		Wells	
				Plant Effluent (CWR)	Raw Influent (Sources)	Plant Effluent (CWR)	Raw Influent (Sources)	Effluent (CWR)	Raw Influent (Sources)	Effluent (CWR)	Raw Influent (Sources)
				Range	Average	Range	Average	Range	Average	Range	Average
Aluminum	µg/L	1000	50	93-250	140	ND	ND				
Calcium	mg/L	no standard			63	63-97	74				
Chloride	mg/L	250			54	40-53	47				
Color	Units	15		<5	<5	<5	<5				
Copper	µg/L	1000	50		ND	ND	ND				
Foaming Agents (MBAS)	mg/L	0.5			ND	ND	ND				
Hardness (Total) as CaCO <sub>3</sub>	mg/L	no standard			200	91-200	140				
Iron	µg/L	300	100		ND	ND	ND				
Magnesium	mg/L	no standard			9.7	5.7-9.7	8.3				
Manganese	µg/L	50	20		ND	ND	ND				
Odor @ 60 C	Units	3	1	<1	<1	<1	<1				
pH	Units	no standard		7.3-7.9	7.6	7.7-8.6	8.0				
Silver	µg/L	100	10			ND	ND				
Sodium	mg/L	no standard			46	ND-44	15				
Specific Conductance	µmhos	900			580	420-580	500				
Sulfate	mg/L	250	0.5		60	47-58	53				
Thiobencarb (Bolero)	µg/L	1	1		ND	ND	ND				
Methyl tert-Butyl Ether (MTBE)	µg/L	5	3		ND	ND	ND				
Total Dissolved Solids	mg/L	500			330	240-320	290				
Turbidity	Units	5		0.01-0.20	0.05	0.02-1.1	0.10				
Zinc	µg/L	5000	50		450	ND	ND				
Total Alkalinity (as CaCO <sub>3</sub> )	mg/L	no standard			140	120-150	140				
Bicarbonate Alkalinity(as HCO <sub>3</sub> )	mg/L	no standard			140	ND-150	50				
Carbonate (as CO <sub>3</sub> )	mg/L	no standard			ND	ND	ND				
Hydroxide (as OH)	mg/L	no standard			ND	ND	ND				

**RADIOLOGICAL CONTAMINANTS**

Parameter	Units	MCL	DLR	PHG	<b>RESULTS</b>			
					Rosamond Plant		Water Bank	
					Raw Influent Sources	Raw Influent Sources	Wells	Wells
					Range	Average	Range	Average
Gross Alpha	pCi/L	15	3					
Gross Beta	pCi/L	50	4			ND		
Strontium 90	pCi/L	8	2	0.35				
Tritium	pCi/L	20,000	1,000	400				
Uranium	pCi/L	20	1	0.43		3.5		
Radium 228	pCi/L		1	0.019		ND		
Radium 226	pCi/L		1	0.05		ND		

**VOLATILE ORGANIC CONTAMINANTS**

Parameter	Units	MCL	DLR	PHG	<b>RESULTS</b>			
					Rosamond Plant		Water Bank	
					Raw Influent (Sources)	Raw Influent (Sources)	Wells	Wells
					Range	Average	Range	Average
1,1,1-Trichloroethane (1,1,1-TCA)	µg/L	200	0.5	1000	ND	ND	ND	ND
1,1,2,2-Tetrachloroethane	µg/L	1	0.5	0.1	ND	ND	ND	ND
1,1,2-Trichloroethane (1,1,2-TCA)	µg/L	5	0.5	0.3	ND	ND	ND	ND
1,1-Dichloroethane (1,1-DCA)	µg/L	5	0.5	3	ND	ND	ND	ND
1,1-Dichloroethylene (1,1-DCE)	µg/L	6	0.5	10	ND	ND	ND	ND
1,2,4-Trichlorobenzene	µg/L	5	0.5	5	ND	ND	ND	ND
1,2-Dichlorobenzene (o-DCB)	µg/L	600	0.5	600	ND	ND	ND	ND

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<u>Parameter</u>	<u>Units</u>	<u>MCL</u>	<u>DLR</u>	<u>PHG</u>	<u>Rosamond Plant</u>		<u>Water Bank Wells</u>	
					<u>Raw Influent (Sources)</u>			
					<u>Range</u>	<u>Average</u>	<u>Range</u>	<u>Average</u>
1,2-Dichloroethane (1,2-DCA)	µg/L	0.5	0.5	0.4	ND	ND	ND	ND
1,2-Dichloropropane	µg/L	5	0.5	0.5	ND	ND	ND	ND
1,3-Dichloropropene (Total)	µg/L	0.5	0.5	0.2	ND	ND	ND	ND
1,4-Dichlorobenzene (p-DCB)	µg/L	5	0.5	6	ND	ND	ND	ND
Benzene	µg/L	1	0.5	0.15	ND	ND	ND	ND
Carbon tetrachloride	µg/L	0.5	0.5	0.1	ND	ND	ND	ND
cis-1,2-Dichloroethylene (c-1,2-DCE)	µg/L	6	0.5	100	ND	ND	ND	ND
cis-1,3-Dichloropropene	µg/L				ND	ND	ND	ND
Dichloromethane (Methylene Chloride)	µg/L	5	0.5	4	ND	ND	ND	ND
Ethylbenzene	µg/L	300	0.5	300	ND	ND	ND	ND
Methyl-tert-butyl ether (MTBE)	µg/L	13	3	13	ND	ND	ND	ND
Monochlorobenzene (Chlorobenzene)	µg/L	70	0.5	70	ND	ND	ND	ND
Styrene	µg/L	100	0.5	0.5	ND	ND	ND	ND
Tetrachloroethylene (PCE)	µg/L	5	0.5	0.06	ND	ND	ND	ND
Toluene	µg/L	150	0.5	150	ND	ND	ND	ND
trans-1,2-Dichloroethylene (t-1,2-DCE)	µg/L	10	0.5	60	ND	ND	ND	ND
trans-1,3-Dichloropropene	µg/L				ND	ND	ND	ND
Trichloroethylene (TCE)	µg/L	5	0.5	1.7	ND	ND	ND	ND
Trichlorofluoromethane (Freon11)	µg/L	150	5	1300	ND	ND	ND	ND
Trichlorotrifluoroethane (Freon 113)	µg/L	1200	10	4000	ND	ND	ND	ND
Vinyl Chloride (VC)	µg/L	0.5	0.5	0.05	ND	ND	ND	ND
Xylenes (Total)	µg/L	1750	0.5	1800	ND	ND	ND	ND

**SYNTHETIC ORGANIC CHEMICALS**

**RESULTS**

<u>Parameter</u>	<u>Units</u>	<u>MCL</u>	<u>DLR (DL)</u>	<u>PHG</u>	<u>Raw Influent (Sources)</u>		<u>Water Bank Wells</u>	
					<u>Range</u>	<u>Average</u>	<u>Range</u>	<u>Average</u>
Alachlor	µg/L	2	1	4	ND	ND		
Atrazine	µg/L	1	0.5	0.15	ND	ND		
Bentazon	µg/L	18	2	200	ND	ND		
Benzo(a)pyrene	µg/L	0.2	0.1	0.007	ND	ND		
Carbofuran	µg/L	18	5	0.7	ND	ND		
Chlordane	µg/L	0.1	0.1	0.03	ND	ND		
2,4-D	µg/L	70	10	20	ND	ND		
Dalapon	µg/L	200	10	790	ND	ND		
Dibromochloropropane (DBCP)	µg/L	0.2	0.01	0.0017	ND	ND		
Di(2-ethylhexyl)adipate	µg/L	400	5	200	ND	ND		
Di(2-ethylhexyl)phthalate	µg/L	4	3	12	ND	ND		
Dinoseb	µg/L	7	2	14	ND	ND		
Diquat	µg/L	20	4	6	ND	ND		
Endothall	µg/L	100	45	94	ND	ND		
Endrin	µg/L	2	0.1	0.3	ND	ND		
Ethylene Dibromide (EDB)	µg/L	0.05	0.02	0.01	ND	ND		
Glyphosate	µg/L	700	25	900	ND	ND		
Heptachlor	µg/L	0.01	0.01	0.008	ND	ND		
Heptachlor Epoxide	µg/L	0.01	0.01	0.006	ND	ND		
Hexachlorobenzene	µg/L	1	0.5	0.03	ND	ND		
Hexachlorocyclopentadiene	µg/L	50	1	2	ND	ND		
Lindane	µg/L	0.2	0.2	0.032	ND	ND		
Methoxychlor	µg/L	30	10	0.09	ND	ND		
Molinate	µg/L	20	2	1	ND	ND		
Oxamyl	µg/L	50	20	26	ND	ND		
Pentachlorophenol	µg/L	1	0.2	0.3	ND	ND		
Picloram	µg/L	500	1	166	ND	ND		

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<u>Parameter</u>	<u>Units</u>	<u>MCL</u>	<u>DLR (DL)</u>	<u>PHG</u>	<u>Raw Influent (Sources)</u>		<u>Water Bank Wells</u>	
					<u>Range</u>	<u>Average</u>	<u>Range</u>	<u>Average</u>
Polychlorinated Biphenyls	µg/L	0.5	0.5	0.09	ND	ND		
Simazine	µg/L	4	1	4	ND	ND		
Thiobencarb (Bolero)	µg/L	70	1	42	ND	ND		
Toxaphene	µg/L	3	1	0.03	ND	ND		
2,3,7,8-TCDD (Dioxin)	pg/L	30	5	0.05	ND	ND		
2,4,5-TP (Silvex)	µg/L	50	1	3	ND	ND		
1,2,3-Trichloropropane	µg/L	0.005	0.005	0.0007	ND	ND		

**DISINFECTION RESIDUAL, PRECURSORS, and BYPRODUCTS**

<u>Type of Sample(s)</u>	<u>Parameter</u>	<u>Units</u>	<u>MCL/MRDL</u>	<u>DLR</u>	<u>MRDLG</u>	<u>RESULTS</u>	
						<u>Range</u>	<u>Average</u>
Distribution	Chlorine (as total Cl <sub>2</sub> )	mg/L	4.0**		4	0.26-1.48	1.07
Treated Water	Total Organic Carbon (TOC)	mg/L	Treatment Requirement	0.3		0.4-0.9	0.6
Source Water	Total Organic Carbon (TOC)	mg/L	Treatment Requirement	0.3		0.5-0.9	0.6
Distribution	Stage 2 D/DBP Rule Total Trihalomethanes	µg/L	80**			14-25	20 #
Distribution	Stage 2 D/DBP Rule Total Haloacetic Acids	µg/L	60**			2.2-7.2	2.1 #
Treated Water	Bromate	µg/L	10*	1.0		ND	ND

\*\* Running Annual Average of distribution system samples. The MCLs are based upon Running Annual Averages.

Stage 2 D/DBP Rule Total THMs and Total HAAs compliance is based upon Locational Running Annual Averages.

# Location with the highest TTHM average

\* Compliance is based on the running annual average computed quarterly, of monthly samples, collected at the entrance to the distribution system.

**DEFINITIONS and FOOTNOTES:**

Plant Effluent, CWR, is finished, treated drinking water.

Raw Water is the Source Water, the California Aqueduct or wells, prior to treatment.

**Units:** mg/L = milligrams per liter, parts per million (ppm)

µg/L = micrograms per liter, parts per billion (ppb)

pg/L = picograms per liter, parts per quadrillion (ppq)

µmhos = micromhos, a measure of specific conductance

pCi/L = pico Curies per liter

< = less than

> = greater than

ND = none detected above the DLR

NTU = nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

**MCL:** Maximum Contaminant Level. The highest level of a contaminant that is allowed in drinking water. MCLs are set by the US Environmental Protection Agency or the State Water Resources Control Board as close to the PHGs and MCLGs as is economically or technologically feasible.

**MRDL:** Maximum Residual Disinfectant Level. The level of a disinfectant added for water treatment that may not exceeded at the consumer's tap.

**DLR:** Detection Limit for purposes of Reporting.

**(DL):** Detection limit determined by the Laboratory when no DLR has been established.

**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.

**MRDLG:** Maximum Residual Disinfectant Level Goal. The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the US Environmental Protection Agency.

**PHG:** Public Health Goal. 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 Office of Environmental Health Hazard

**Primary Drinking Water Standard:** Primary MCLs, specific treatment techniques adopted in lieu of primary MCLs, and monitoring and reporting requirements for MCLs that are specified in regulations. Assessment.

**Secondary Standards:** Aesthetic standards established by the State Water Resources Control Board.

All analyses performed by ELAP certified laboratories: AVEK Water Agency, Eurofins Eaton Analytical Laboratories, or Eurofins subcontract lab.