

2019 Consumer Confidence Report

Water System Name: Edgemont Acres Mutual Water Co Report Date: September 9, 2020

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, 2014 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: Antelope Valley East Kern Water Agency Aqueduct System

Name & general location of source(s): AVEK Kern County System

Drinking Water Source Assessment information: Available at Company Office and online at
<https://www.avek.org/files/19c680319/20.04.01+2019+Annual+Water+Quality+Report+-+Kern+County.pdf>

Time and place of regularly scheduled board meetings for public participation: 5:00pm and 4th Wednesday each
Month at the company office at 16638 Vista Del Oro, North Edwards

For more information, contact: Todd Amon Phone: (760)769-4764

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: State Board 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 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.

Table 1 lists 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.

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	(In a mo.)	0	More than 1 sample in a month with a detection	5%+	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	(In the year)	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	1+	Human and animal fecal waste

Chemical	Analysis Results	MCL G/L	DLR G/L
Regulated Organic Chemicals			
Bromodichloromethane	1.4		.5
Bromoform	8.9		.5
Chloroform (Trichloromethane)	ND		.5
Dibromochloromethane	5.2		.5
Total Trihalomethanes (TTHMs)	15.0		.5
Regulated Organic Chemicals			
Monochloroacetic Acid (MCAA)	ND		2.0
Dichloroacetic Acid (DCAA)	ND		1.0
Trichloroacetic Acid (TCAA)	ND		1.0
Monobromoacetic Acid (MBAA)	ND		1.0
Dibromoacetic Acid (DBAA)	4.0		1.0
Haloacetic Acids (five)(HAA5)	4.0		2.0
Source: ST2S1 "16863 Foothill Ave"		8/14/19	

Chemical	Analysis Results	MCL G/L	DLR G/L
Regulated Organic Chemicals			
Bromodichloromethane	1.4		.5
Bromoform	9.5		.5
Chloroform (Trichloromethane)	ND		.5
Dibromochloromethane	5.2		.5
Total Trihalomethanes (TTHMs)	16.0		
Regulated Organic Chemicals			
Monochloroacetic Acid (MCAA)	ND		2.0
Dichloroacetic Acid (DCAA)	ND		1.0
Trichloroacetic Acid (TCAA)	ND		1.0
Monobromoacetic Acid (MBAA)	ND		1.0
Dibromoacetic Acid (DBAA)	3.7		1.0
Haloacetic Acids (five)(HAA5)	3.7		2.0
Source: ST2S2 "16976 Hillcrest Ave"	8/14/19		

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).

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement: NONE

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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: **0.17 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: **0.76**
 Number of violations of the Groundwater Rule: **NONE**

MICROBIOLOGICAL CONTAMINANTS												
Type of Sample(s)	Parameter	Sampling Frequency	MCL	No. of Months in Violation	System Results							
Distribution	Total Coliform Bacteria	56 - 70 / mo	5% positive	None	Range	Average						
Distribution	E. coli	56 - 70 / mo	1 pos. with 2 TC pos.	None	0%	0%						
INORGANIC CONTAMINANTS												
Parameter	Units	MCL	DLR	PHG	RESULTS				Wells			
					Rosamond Plant		Water Bank					
Aluminum	µg/L	1000	50	600	Plant Effluent (CWR)	Raw Influent (Sources)	Effluent (CWR)					
Antimony	µg/L	6	6	1	Range	Range	Range					
Arsenic	µg/L	10	2	0.004	85-110	Average	Average					
Barium	µg/L	1000	100	2000	2.3-3.6	94	ND	3.0-6.4				
Beryllium	µg/L	4	1	1	ND	ND	ND	4.5				
Cadmium	µg/L	5	1	0.04	ND	ND	ND	2.8-11				
Chromium (Total)	µg/L	50	10	0.02	ND	ND	ND	4.4				
Chromium (Hexavalent)	µg/L	*	1	0.02	ND	2.4	2.2-2.7					
Cyanide	µg/L	150	100	150	3.1	3.2	2.8-3.0					
Fluoride	mg/L	2	0.1	1	76	ND	ND					
Lead	µg/L	15	5.0	0.2	0.19	0.19	0.17-0.21					
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	ND	3.3	1.7-2.9	1.8-4.0				
Nitrite (as N)	mg/L	1	0.4	1	ND	ND	ND	ND				
Nitrate+Nitrite (as N)	mg/L	10	10	10	3.3	3.3	2.4	ND				
Perchlorate	µg/L	6	4	1	ND	ND	ND	ND				
Selenium	µg/L	50	5	30	5.5	ND	ND	ND				
Thallium	µg/L	2	1	0.1	ND	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.

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GENERAL PHYSICAL AND SECONDARY STANDARDS

Parameter	Units	MCL	DLR	Rosamond Plant		Water Bank Wells	
				Plant Effluent (CWR) Range Average	Raw Influent (Sources) Range Average	Effluent (CWR) Range Average	Wells Range Average
Aluminum	µg/L	1000	50	85-110	94	ND	ND
Calcium	mg/L	no standard		91	85-91	88	
Chloride	mg/L	250		92	86-88	87	
Color	Units	15		<5	<5	<5	<5
Copper	µg/L	1000	50	ND	3.7-8.7	6.2	
Foaming Agents (MBAS)	mg/L	0.5		ND	ND	ND	
Hardness (Total) as CaCO3	mg/L	no standard		270	260-270	270	
Iron	µg/L	300	100	ND	ND	ND	
Magnesium	mg/L	no standard		11.0	11	11	
Manganese	µg/L	50	20	ND	ND	<1	
Odor @ 60 C	Units	3	1	<1	<1	<1	
pH	Units	no standard		7.6-8.3	7.6-8.4	7.90	<1
Silver	µg/L	100	10	ND	ND	ND	7.4-7.8
Sodium	mg/L	no standard		47	45-47	46	
Specific Conductance	µmhos	900		760	710-750	730	470-800
Sulfate	mg/L	250	0.5	71	60-66	63	680
Thiobencarb (Boloro)	µg/L	1	1	ND	ND	ND	
Methyl tert-Butyl Ether (MTBE)	µg/L	5	3	ND	ND	ND	ND
Total Dissolved Solids	mg/L	500		470	440-470	460	ND
Turbidity	Units	5		0.02-0.17	0.02-0.38	0.06	0.02-3.3
Zinc	µg/L	5000	50	520	ND	ND	0.28
Total Alkalinity (as CaCO3)	mg/L	no standard		160	160	160	
Bicarbonate Alkalinity(as HCO3)	mg/L	no standard		190	190	190	
Carbonate (as CO3)	mg/L	no standard		ND	ND	ND	
Hydroxide (as OH)	mg/L	no standard		ND	ND	ND	

RADIOLOGICAL CONTAMINANTS

Parameter	Units	MCL	DLR	Rosamond Plant		Water Bank Wells	
				Range	Average	Range	Average
Gross Alpha	pCi/L	15	3				
Gross Beta	pCi/L	50	4				
Strontium 90	pCi/L	8	2				
Tritium	pCi/L	20,000	1,000				
Uranium	pCi/L	20	1				
Radium 228	pCi/L		1		0.43		
Radium 226	pCi/L		1		0.019		
					0.05		

VOLATILE ORGANIC CONTAMINANTS

Parameter	Units	MCL	DLR	PHG	Rosamond Plant		Water Bank Wells	
					Raw Influent (Sources) Range Average	Range Average	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

RESULTS

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Parameter	Units	MCL	DLR	PHG	Rosamond Plant Raw Influent (Sources) Range	Average	Water Bank Wells Range	Average
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 (Freon 11)	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-1.2	0.2	ND	ND

SYNTHETIC ORGANIC CHEMICALS

Parameter	Units	MCL	DLR (DL)	PHG	Raw Influent (Sources) Range	Average	Water Bank Wells Range	Average
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		
Datapon	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		
Endosulf	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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Parameter	Units	MCL	DLR (DL)	PHG	Raw Influent (Sources)		Water Bank Wells	
					Range	Average	Range	Average
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-Trichloropropene	µg/L	0.005	0.005	0.0007	ND	ND		

DISINFECTION RESIDUAL, PRECURSORS, and BYPRODUCTS

Type of Sample(s)	Parameter	Units	MCL/MRD	DLR	MRDLG	RESULTS	
						Range	Average
Distribution	Chlorine (as total Cl ₂)	mg/L	4.0**		4	0.26-1.56	1.01
Treated Water	Total Organic Carbon (TOC)	mg/L	Treatment Requirement	0.3		0.3-0.6	0.6
Source Water	Total Organic Carbon (TOC)	mg/L	Treatment Requirement	0.3		0.3-0.7	0.6
Distribution	Stage 2 D/DBP Rule Total Trihalomethanes	µg/L	80**			4.3-20	14 #
Distribution	Stage 2 D/DBP Rule Total Haloacetic Acids	µg/L	60**			ND-3.2	2.0 #
Treated Water	Bromate	µg/L	10*		5	--	--

** 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

Assessment.

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.

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.

STAGE 2 DISINFECTION BYPRODUCT RULE TOTAL TRIHALOMETHANE (TTHM) AND HALOACETIC ACIDS (HAA5) QUARTERLY SUMMARY REPORT

Water System Name Antelope Valley-East Kern Water Agency Water System Number 1510053

TTHM (ppb)													
Sample Date -->	Monitoring Periods				OEL	LRAA	Monitoring Periods				OEL	LRAA	
	MP1 (3 qtrs ago)	MP2 (2 qtrs ago)	MP3 (last qtr)	MP4 (current qtr)			MP1 (3 qtrs ago)	MP2 (2 qtrs ago)	MP3 (last qtr)	MP4 (current qtr)			
	02/21/19	05/16/19	08/15/19	11/21/19			2/21/19	5/16/19	8/15/19	11/21/19			
Sample Locations													
1	EAFB	4.3	11	16	19	16.3	12.6	ND	ND	3.2	2.6	2.0	1.5
2	Boron	4.8	12	18	20	17.5	13.7	ND	2.1	3.1	2.7	2.1	2.0
3						0.0						0.0	
4						0.0						0.0	
5						0.0						0.0	
6						0.0						0.0	
7						0.0						0.0	
8						0.0						0.0	

Signature  Date 12/31/19

- Instructions:**
- Please begin by filling out your water system name and number.
 - Enter the name of the Stage 2 sample site at the left of each row used.
 - Fill in the date of the current monitoring period under the TTHM Section on the left. The same date will automatically appear under the same monitoring period in the HAA5 section on the right. Use the following date format: mm/dd/yy.
 - Under the date entered, place the TTHM result for each sample station on the left hand side and do the same for HAA5 results on the right hand side.
 - The Operational Evaluation Level (OEL) and Locational Running Annual Average (LRAA) will automatically be calculated if you're using this form electronically. Please keep the previous three quarters of data on the sheet to allow these calculations to work. For example, if you've completed four quarters of monitoring and are on to the 1st quarter of the next year, leave the 2nd, 3rd and 4th quarters from the previous year and replace the data from the first quarter of last year with the 1st quarter data from the current year. If you are not using this form electronically, the equations for the OEL and LRAA are located at the bottom of the page.
 - Sign and date the report

$$OEL = \text{Operational Evaluation Level} = ((2 * MP1) + MP2 + MP3) / 4$$

$$LRAA = \text{Locational Running Annual Average} = (MP1 + MP2 + MP3 + MP4) / 4$$

MP1 = 3 Quarters Ago
MP2 = 2 Quarters Ago

MP3 = Last Quarter
MP4 = Current Quarter

Quarterly Bromate Report for Disinfection Byproducts Compliance (in µg/L or ppb)

System Name: Antelope Valley-East Kern Water Agency

System No.: 1510053

Year: 2019 Quarter: 4th

	2018				1st Qtr.				2nd Qtr.				3rd Qtr.				4th Qtr.			
Sample Date (month/date):	1st Q	2nd Q	3rd Q	4th Q	1/9	2/13	3/13	Quarterly Average	4/10	5/8	6/12	Quarterly Average	7/10	8/14	9/11	Quarterly Average	10/9	11/13	12/11	Quarterly Average
Site 1 - Bromate	0.0	0.0	0.0	0.0	OFF	OFF	OFF	0.0	OFF	OFF	OFF	0.0	OFF	OFF	OFF	0.0	OFF	OFF	OFF	0.0

Running Annual Average					0.0				0.0				0.0				0.0				0.0
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Meets Standard?*																					
(check box)																					
									Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>								Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>				Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Identify the sample locations in the table below.

Site	Sample Location
1	Rosamond Clear Well Reservoir

Comments: Ozone off all quarter.

Signature



Date

12/31/2019

*If, during the first year of monitoring, any individual quarter's average will cause the running annual average of that system to exceed the standard, then the system is out of compliance at the end of that quarter.

Quarterly Report for Disinfectant Residuals Compliance For Systems Using Chlorine or Chloramines

System Name: Antelope Valley-East Kern Water Agency

System No.: 1510053

Calendar Year: 2019

Quarter: 4TH

1st Quarter		
Month	Number of Samples Taken	Monthly Ave. Chlorine Level (mg/L)
Previous Year	April	1.14
	May	1.05
	June	0.89
	July	0.94
	August	1.08
	September	1.05
	October	0.99
	November	1.05
	December	0.99
Current Year	January	70
	February	56
	March	56
Running Annual Average (RAA):		1.03
Meets standard? (i.e. RAA < MRDL of 4.0 mg/L as Cl ₂)		YES

2nd Quarter		
Month	Number of Samples Taken	Monthly Ave. Chlorine Level (mg/L)
Previous Year	July	0.94
	August	1.08
	September	1.05
	October	0.99
	November	1.05
	December	0.99
Current Year	January	1.03
	February	1.02
	March	1.13
	April	70
	May	56
	June	56
Running Annual Average (RAA):		1.03
Meets standard? (i.e. RAA < MRDL of 4.0 mg/L as Cl ₂)		YES

3rd Quarter		
Month	Number of Samples Taken	Monthly Ave. Chlorine Level (mg/L)
Previous Yr	October	0.99
	November	1.05
	December	0.99
Current Year	January	1.03
	February	1.02
	March	1.13
	April	1.05
	May	0.98
	June	1.01
	July	70
	August	56
	September	56
Running Annual Average (RAA):		1.01
Meets standard? (i.e. RAA < MRDL of 4.0 mg/L as Cl ₂)		YES

4th Quarter		
Month	Number of Samples Taken	Monthly Ave. Chlorine Level (mg/L)
Current Year	January	1.03
	February	1.02
	March	1.13
	April	1.05
	May	0.98
	June	1.01
	July	0.96
	August	0.96
	September	0.98
	October	70
	November	56
	December	70
Running Annual Average (RAA):		1.01
Meets standard? (i.e. RAA < MRDL of 4.0 mg/L as Cl ₂)		YES

Comments:

Signature: 

Date: 12/31/2019

Antelope Valley-East Kern Water Agency
Kern System No. 1510053
TOC Removal Running Annual Average

Sample Date	Plant	Alkalinity mgCaCO ₃ /L	Raw TOC mg/L	Treated TOC mg/L	Actual % TOC reduction	Required % TOC reduction	"TOC Removal Ratio" actual % /required %
1/14/2019	RWTP	166	0.69	0.68	0.0	25	1.0
2/13/2019	RWTP	140	0.52	0.54	0.0	25	1.0
3/13/2019	RWTP	plant off					
4/10/2019	RWTP	155	0.60	0.63	0.0	25	1.0
5/8/2019	RWTP	164	0.59	0.62	0.0	25	1.0
6/12/2019	RWTP	159	0.67	0.65	2.98	25	1.0
7/10/2019	RWTP	160	0.62	0.62	0.0	25	1.0
8/14/2019	RWTP	145	0.54	0.52	3.70	25	1.0
9/27/2019	RWTP	148	0.69	0.70	0.0	25	1.0
10/9/2019	RWTP	156	0.60	0.63	0.0	25	1.0
11/13/2019	RWTP	109	0.31	0.30	3.23	25	1.0
12/11/2019	RWTP	120	0.40	0.43	0.0	25	1.0
Minimum		109.0	0.3	0.3	0.0		
Maximum		166.0	0.7	0.7	3.7		
RAA		147.5	0.6	0.6	0.9		

Running Annual Average (RAA) 1.0

Title 22 California Code of Regulations Article 5:

Required percent TOC reduction**

Table 64536.2-A

Source Water Alkalinity

Raw TOC	0-60	<60 - 120	>120
>2.0 - 4.0	35.0 %	25.0 %	15.0 %
>4.0 - 8.0	45.0 %	35.0 %	25.0 %
>8.0	50.0 %	40.0 %	30.0 %

**If one or more of the section 64536.4(b) 1-6 conditions are met, the system may assign a monthly value of 1 for the TOC removal ratio in lieu of the calculated value

List condition when used: 1

1. The system's source water TOC level, prior to any treatment is less than or equal to 2.0 mg/L
2. The system's treated water TOC level is less than or equal to 2.0 mg/L
3. The system's source water SUVA, prior to any treatment, is less than or equal to 2.0 L/mg-m
4. The system's finished water SUVA is less than or equal to 2.0 L/mg-m
5. A system practicing softening removes at least 10 mg/L of magnesium hardness (as CaCO₃)
6. A system practicing enhanced softening lowers alkalinity below 60 mg/L (as CaCO₃)