2019 Consumer Confidence Report

Water System Name: Desert Lake Community Services District Report Date: May 28, 2020

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

We are pleased to provide you with this report, and we want to keep you informed about the water and services we have delivered to you over the past year. Our Goal is, and always has been, to provide to you a safe and dependable supply of drinking water. 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 through December 31, 2019.

The water sources connected to the District's system are inactive Well No. 1, standby Well No. 2, and purchased surface water from Antelope Valley East Kern Water Agency (AVEK). Well No. 2 is located east of Borax Road and 2½ miles South of Rio Tinto Minerals. Well No. 1 is located one block north of 20 Mule Team Road and one block east of Borax Road. Since January 2012, the District's main source of water is and has been purchased surface water from AVEK. Hence, the reason the District has also included AVEK's 2019 Consumer Confidence Report for your review within this mailing.

If you have any questions about this report or concerns about the district utility system, please contact the General Manager, Natalie Russell at 661-363-3350 or the District Secretary, DeAnna Love at 760-762-5349, Tuesday through Thursday, 9:00 a.m. to 5:00 p.m. The office is closed for lunch between 12:00 p.m. and 1:00 p.m. Our regularly scheduled monthly board meetings are held the third Monday of each month at the district office board room located at 12200 Del Oro Street in Desert Lake at 5:00 p.m.

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.

The following tables 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 MC or AL is asterisked. Additional information regarding the violation is provided later in this report.

TABLE 1 – MONTHLY BACTERIOLOGICAL ANALYSIS REQUIRES 1 TEST PER MONTH FOR COLIFORM BACTERIA. TEST RESULTS WERE NEGATIVE FOR COLIFORM BACTERIA IN THE DISTRIBUTION.

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER: IF PRESENT, ELEVATED LEVELS OF LEAD CAN CAUSE SERIOUSHEALTH PROBLEMS, ESPECIALLY FOR PREGNANT WOMEN AND YOUNG CHILDREN. LEAD IN DRINKING WATER IS PRIMARILY FROM MATERIALS AND COMPONENTS ASSOCIATED WITH SERVICE LINES AND HOMEPLUMBING. WHEN YOUR WATER HAS BEEN SITTING FOR SEVERAL HOURS, YOU CAN MINIMIZE POTENTIAL FOR LEAD EXPOSURE BY FLUSHING YOU TAP FOR 30 SECONDS TO 2 MINUTES BEFORE USING WATER FOR DRINKING OR COOKING. IF YOU ARE CONCERNED ABOUT LEAD IN YOUR WATER, YOU MAY WISH TO HAVE YOUR WATER TESTED. ADDITIONAL INFORMATION IS AVAILABLE FROM THE SAFE DRINKING WATER HOTLINE AT (800) 426-4791.

Lead and Copper (complete if lead or copper detected in the last sample set)	No. of samples collected	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant			
Lead (ppb)	10	ND	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits			
Copper (ppm)	10	.320	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives			

TABLE 3 – MONTHLY BACTERIOLOGICAL TESTING REQUIRES CHLORINE TESTING TO BE CONDUCTED AT THE SAME TIME WITHIN THE DISTRIBUTION SYSTEM. THE CHLORINE RESULTS ARE AS FOLLOWS:

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant			
Chlorine (ppm)	2019	2.9	1.6 – 4.6	[4]	[4]	Water additive to control microbes			

TABLE 4 – DISINFECTION BY-PRODUCTS: SAMPLING FOR DISINFECTION BY-PRODUCTS, INCLUDING TOTAL TRIHALOMETHANES (TTHM) AND HALOACETIC ACIDS (HAA5), WERE CONDUCTED AS REQUIRED FOR 2019. DESERT LAKE CSD DOES NOT CHLORINATE THE DRINKING WATER; HOWEVER AVEK DOES. THESE BY-PRODUCTS ARE A RESULT OF DRINKING WATER CHLORINATION.

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	Typical Source of Contaminant
Total Trihalomethanes (ppb)	7/29/2019	22	0.20-0.45	80	By-product of drinking water chlorination
Total Haloacetic Acids (ppb)	7/29/2019	4.7	ND-8.2	60	By-product of drinking water chlorination

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).

Under the Safe Drinking Water Act (SDWA), the United States Environmental Protection Agency (USEPA) is responsible for setting national limits for hundreds of substances in drinking water and also specifies various treatments that water systems must use to remove these substances. Each system continually monitors for these substances and reports their findings to the USEPA. The USEPA uses this data to ensure that consumers are receiving clean water.

This publication conforms to the regulation under SDWA requiring water utilities to provide detailed water information to each of their customers annually. We are committed to providing you with this information about your water supply because customers who are well informed are our best allies in supporting improvements necessary to maintain the highest water standards.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During the calendar year 2019, we collected samples for total Trihalomethanes and Haloacetic acids (Disinfection By-products) from the approved location in the distribution system on July 29th, 2019, and failed to collect these samples within the specified timeframe of September 2019 per our approved DBP monitoring plan, thereby violated the monitoring requirements in the regulation.

2019 Annual Water Quality Report - Kern County System Antelope Valley-East Kern Water Agency

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: Highest single turbidity measurement during the year: 0.17 NTU

100%

Highest single turbidity measurement during the year: Percentage of samples < 0.30 NTU: 100%

in compliance with filtration requirements. 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

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 continously providing a minimum free chlorine residual of 0.5 mg/L leaving

Lowest single free chlorine residual measurement during the year: Number of violations of the Groundwater Rule: NONE 0.76

	Inallium	Selenium	Perchiorate	Nitrate+Nitrite (as N)	Nille (as N)	Nitrate (as N)	NICKE	Mercury	Lead	Fluoride	Cyanide	Chromium (Hexavalent)	Chromium (Total)	Cadmium	Beryllium	Barium	Arsenic	Antimony	Aluminum	Parameter					Distribution	Type of Sample(s)	
		µg/L	µg/L	mg/L	mg/L	mg/L	μg/L	µg/L	μg/L	mg/L	µg/L	1/gr	µg/L	µg/L	µg/L	µg/L	нд/∟	µg/L	Hg/L	Units					Total Coliform Bacteria E. coli	Parameter	
i nere is currer	. 2	50	o	10		10	100	N	15	2	150	*	50	C I	4	1000	10	0	1000	MCL					acteria		
itly no MCL for h	_	Ch	4		0.4	0.4	10	_	5.0	0.1	100	_	10	_		100	2	6	50	DLR					56 - 70 / mo 56 - 70 / mo	Sampling Frequency	
nexavalent chro	0.1	30		10	_	10	12	1.2	0.2		150	0.02		0.04	_	2000	0.004	_	600	PHG			-		0/mo	requency	MICE
I nere is currently no MCL tor hexavalent chromium. The previous MCL of 0.010 mg/L was withdrawn on September 11, 2017.																	2.3-3.6		85-110	Range	Plant Effluent (CWR)		NORGANIC CONTAMINANTS	,	1 pc		MICROBIOLOGICAL CONTAMINANTS
ious MCL of 0.0	ND D	5.5	ND	3.3	N O	3.3	NO O	S	ND	0.19	ND N	3.2	2.4	N	N	76	3.1	ND	94	Average	nt (CWR) Raw		NTAMINANTS		5% positive pos. with 2 TC pos.	MCL	CONTAMINAN
010 mg/L was w	ND	ND	N	2.4	N	1.7-2.9	ND	ND	ND	0.17-0.21	S	2.8-3.0	2.2-2.7	S	N	77-80	2.6-7.8	ND	ND	Range	Raw Influent (Sources)	2			ÿ.		ITS STI
ithdrawn on Se	N	B	B	2.4	ND	2.5	S	ND	ND ND	0.19	N N	2.9	2.5	S	ND	78	3.9	ND	ND N	Average	(Sources)	RESULTS			None	No. of Months	
ptember 11, 20																	3.0-6.4			Range	Effluent (CW/R)	LTS		i	ne ne	of Months in Violation	
17.															10		4.5			Average	(CWR) Water Bank						
		j	S		N	1.8-4.0										:	2.8-11		- Series	Range				2	0%	System Results	
-	- Jon	i	5	200	N	ω ω										-	44		- April age	Average	5			6	0%	Results	

Antelope Valley-East Kern Water Agency 2019 Annual Water Quality Report - Kern County System

Parameter 1,1,1-Trichlorethane (1,1,1-TCA) 1,1,2:T-Tetrachloroethane 1,2:Trichloroethane (1,1,2-TCA) 1,1-Dichloroethane (1,1-DCA) 1,1-Dichloroethylene (1,1-DCE) 1,2,4-Trichlorobenzene 1,2-Dichlorobenzene (o-DCB)	Parameter Gross Alpha Gross Beta Strontlum Uranium Uranium Radium 228 Radium 226	Parameter Aluminum Calcium Chloride Color Copper Copper Foaming Agents (MBAS) Hardness (Total) as CaCO3 Iron Magnesium Manganese Odor @ 60 C pH Silver Sodium Specific Conductance Sulfate Thiobenatb (Bolero) Methyl tert-Butyl Ether (MTBE) Total Dissolved Solids Turbidity Zinc Total Alkalinity (as CaCO3) Bicarbonate Alkalinity(as HCO3) Carbonate (as CO3) Hydroxide (as CO4) Hydroxide (as CO4)
Units H9/L H9/L H9/L H9/L	Units pCi/L pCi/L pCi/L pCi//L pCi//L pCi//L	Unitis Hg/L Mg/L
MCL 2000 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	MCL 15 50 8 20,000 20	MCL 1000 no standard 250 15 1000 0.5 1000 0.5 no standard 300 no standard 100 no standard 100 no standard 100 no standard 100 no standard
0.5 0.5 0.5 0.5 0.5 0.5	DLR 3 1,000	GENERAL F 50 50 100 100 100 3
VOLATILE ORGANIC CONTAMINANTS PHG	RADIOLOGICAL CONTAMINANTS Rosamond PHG Raw Influent Range 0.35 400 0.43 0.019 0.05	DLR PHYSICAL AND SECONDARY STANDARDS RESAMENT Rosamond Plant Ros
Rosamo Raw Influer Raw Influer Range ND ND ND ND ND ND ND	CONTAMINAN: Rosamo Raw Influe Ramge	SECONDARY Rosam ent (CWR) Average 94 91 92 <5 ND ND 11.0 ND 11.0 ND 7.8 ND A7.8 ND A
ONTAMINANTS Results Rosamond Plant Raw Influent (Sources) Range Average ND ND ND ND ND	TAMINANTS RESULTS Rosamond Plant Raw Influent Sources Range Average Fig. 12 Average Fig. 12 Average Fig. 12 F	Rosamond Plant Raw Influer Raw Influer Rampe
ULTS Water Bank Wells Range Av. ND ND ND ND ND ND ND ND ND N	JLTS Water Bank Wells Range <u>Av</u>	RESULTS Plant Raw Influent (Sources) Ramae Average ND ND S-91 88 86-88 87 <5 <5 3,7-8.7 6.2 ND ND 11 11 ND ND 11 11 ND ND 17.6-8.4 7.90 ND ND 45-47 46 710-750 730 60-66 63 ND ND ND ND ND ND ND ND
Bank Average ND	r Bank ells Average	Effluent (CWR) Range Average
		Water Bank Range <5-10 <7.4-7.8 ND 0.02-3.3
		Wells Be Average Average 7.56 ND ND ND NO NO NO NO NO NO NO

Antelope Valley-East Kern Water Agency 2019 Annual Water Quality Report - Kern County System

Parameter Alachior Alachior Atrazine Bentazon Benzo(a)pyrene Carbofuran Chiordane 2,4-D Dalapon Dibromochloropropane (DBCP) Di(2-ethylhexyl)adipate Di(2-ethylhexyl)phthalate Di(2-ethylhexyl)phthalate Di(2-ethylhexyl)phthalate Diquat Endothall Endothall Endrin Ethylene Dibromide (EDB) Glyphosate Heptachlor Heptachlor Epoxide Hexachlorobenzene Hexachlorocyclopentadiene Lindane Methoxychlor Molinate Oxamyl Pentachlorophenol Picloram	Parameter 1,2-Dichloropethane (1,2-DCA) 1,2-Dichloropropane 1,3-Dichloropropene (Total) 1,4-Dichloropropene (p-DCB) Benzene Carbon tetrachloride cis-1,2-Dichloropropene Dichloromethane (Methylene Chloride) Ethylbenzene Methyl-tert-butyl ether (MTBE) Monochlorobenzene (Chlorobenzene) Styrene Tetrachloroethylene (PCE) Toluene trans-1,2-Dichloropropene Trichloroethylene (TCE) Trichloroethylene (TCE) Trichloroethylene (TCE) Trichlorotifluromethane (Freon 11) Trichlorotifluromethane (Freon 113) Vinyl Chloride (VC) Xylenes (Total)
19/1/ 19/1/ 19/1/ 19/1/ 19/1/ 19/1/ 19/1/ 19/1/ 19/1/ 19/1/ 19/1/ 19/1/ 19/1/ 19/1/ 19/1/ 19/1/ 19/1/ 19/1/ 19/1/	######################################
MCL 2 118 0.2 118 0.1 70 200 0.2 400 4 4 7 7 20 0.05 700 0.01 0.01 0.01 0.02 0.01 0.01 0.01 0.	MCL 0.5 5 0.5 5 0.5 6 6 6 6 100 100 150 100 1200 0.5
DLR (DL) 1 0.5 0.1 5 0.1 10 10 0.01 0.01 5 2 0.01 0.02 2 25 0.01 0.02 25 0.01 0.02 25 0.01 0.02 26 0.01 0.02 27 0.02 28 0.01 0.02 0.02 0.03 0.03 0.03 0.04 0.05 0.05 0.06 0.06 0.07 0.07 0.08 0.08 0.09 0.09 0.09 0.09 0.09 0.09	DLR 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5 0.5
SYNTHETIC ORGANIC CHEMICALS PHG	PHG 0.4 0.5 0.2 6 0.15 0.15 0.15 0.15 0.16 130 70 0.5 0.06 130 130 70 0.5 0.06 130 0.06
Raw Influe Range Range ND	Rosam Raw Influe Range ND
Average No. 10 N	Rosamond Plant Raw Influent (Sources) Range Average ND N
RESULTS Water B Je Range	NO N
Water Bank Wells ange Average	Water Bank Wells Wells Average ND

2019 Annual Water Quality Report - Kern County System Antelope Valley-East Kern Water Agency

Type of Sample(s)		1,2,3-Trichloropropane	2,4,5-TP (Silvex)	2,3,7,8-1CDD (Dioxin)	loxaphene	I hiobencarb (Bolero)	Simazine	Polycniorinated Biphenyls	Parameter	,
Parameter										
		µg/L	µg/L	pg/L	µg/L	Hg/L	µg/L	µg/L	Units	
Units		0.005	50	30	ω	70	4	0.5	MCL	
MCL/MRDL	DISINFECTION RESIDUAL, PRECURSORS, and BYPRODUCT:	0.005		Οī	_		_	0.5	DLR (DL)	
	SIDUAL, PRE	0.0007	ω	0.05	0.03	42	4	0.09	PHG	
PLR	ECURSORS, ar	N D	ND	ND	ND	ND	ND	S O	Range	Raw Influen
MRDLG	IN BYPRODUCT	B	S	ND	R	B	N	N	Average	
Range	O)								Range	Water E
RESULTS B Average						8 × gr			Range Average	3ank Wells
										SNET

** 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 Bromate Hg/L 10+ Distribution Distribution Source Water Treated Water Distribution

Stage 2 D/DBP Rule Total Trihalomethanes µg/L Stage 2 D/DBP Rule Total Haloacetic Acids µg/L

Total Organic Carbon (TOC) Total Organic Carbon (TOC) Chlorine (as total Cl2)

mg/L mg/L

Treatment Requirement Treatment Requirement

0.3

Range 0.26-1.56 0.3-0.6 0.3-0.7 4.3-20 ND-3.2

Average 1.01 0.6 0.6 14 # 2.0 #

4

60** 80**

* 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.

Units: mg/L = milligrams per liter, parts per million (ppm) Raw Water is the Source Water, the California Aqueduct or wells, prior to treatment.

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

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 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

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