

## 2018 Consumer Confidence Report

Water System Name: White Fence Farms Mutual Water Co. 3 Report Date: April 1, 2019

*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, 2018 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: Purchased Treated Surface Water only (Groundwater Sources were not used in 2018)

Name & general location of source(s): Antelope Valley East Kern Water Agency (AVEK) Connection - Palmdale  
(Well 01A and Well 2 in Palmdale were not used in 2018, with Well 2 inactivated in March 2018).

Drinking Water Source Assessment information: Wells 01A and 2 were not used in 2018 and the below is for information purposes only.

Source Water Assessments were conducted for Wells 01A and 02 of White Fence Farms MWC #3 in August 2001 by the State Water Resources Control Board, Division of Drinking Water.

Copies of the complete assessments may be viewed at: State Water Resources Control Board, Division of Drinking Water, 500 North Central Avenue, Suite 500, Glendale, CA 91203.

Additional copies are also available, per email request [wffmw3@gmail.com](mailto:wffmw3@gmail.com)

The Company plans to update the information contained in the source assessment in the near future.

Well 01A – This source is not considered vulnerable to any potentially contaminating activities at this time and not associated with contaminants found in the water. (as of Aug. 2001)

Nitrate has been detected to a level as high as 40 mg/L, which is above half the MCL of 45 mg/L. There is nothing that could be associated with nitrate around the area, so it could be considered as naturally occurring. Another possible reason is a historic animal feeding operation around the area. This land use is rural, so this may be a strong possibility.

Fluoride has been detected at a level of 0.3 mg/L, which is higher than the DLR level of 0.1, but is well below the MCL of 2.0 mg/L. This detection could have come from a possible historic demolition/construction staging area.

Well 02 – This source is not considered vulnerable to any potentially contaminating activities at this time that are not associated with contaminants found in the water. (as of Aug 2001)

Nitrate has been detected to a level of 58 mg/L which is above the MCL of 45 mg/L. There is nothing that could be associated with nitrate around the area, so it could be considered as naturally occurring. Another possibility is a historic animal feeding operation around the area. This land use is rural so this may be a strong possibility.

Di-(e-ethylhexyl) phthalate has been detected at a level of 4 ug/L, which is exactly the value of the MCL. There is nothing around the areas associated with this chemical. There may have been historic hardware/lumber/parts store in the general area that may have contributed to this chemical's detection.

In March 2017, Well 2 was inactivated. The well will be destroyed in the future.

Time and place of regularly scheduled board meetings for public participation:

2<sup>nd</sup> Tuesday of each Month at Well Site 1A, at 6:00pm.

For more information, contact: Brandi J. Moore

Phone: ( 661 ) 943-6916



## 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.

**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.

**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)

**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)	(In a mo.) 0	None	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i> (state Total Coliform Rule)	(In the year) 0	None	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	0	Human and animal fecal waste
<i>E. coli</i> (federal Revised Total Coliform Rule)	(In the year) 0	None	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or <i>E. coli</i>	0	Human and animal fecal waste

(a) Routine and repeat samples are total coliform-positive and either is *E. coli*-positive or system fails to take repeat samples following *E. coli*-positive routine sample or system fails to analyze total coliform-positive repeat sample for *E. coli*.

**TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER**

Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of Samples Collected	90 <sup>th</sup> Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	No. of Schools Requesting Lead Sampling	Typical Source of Contaminant
Lead (ppb)	9/20/16	10	ND	None	15	0.2	Not applicable	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	9/20/16	10	0.23	None	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)  <i>Used 100% AVEK Water</i>  See attached AVEK 2018 Water Quality Report				none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)  <i>Used 100% AVEK Water</i>  See attached AVEK 2018 Water Quality Report				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
<i>Used 100% AVEK Water</i>						
See attached AVEK 2018 Water Quality Report						

**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
<i>Used 100% AVEK Water</i>						
See attached AVEK 2018 Water Quality Report						

**TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS**

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
NONE					

### 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. [INSERT NAME OF UTILITY] 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
Stage 2 Disinfectant/Disinfectant By-Products Rule Monitoring Violation	Failing to monitor the distribution system for total trihalomethanes (TTHM) and five haloacetic (HAA5) acids in accordance with the approved monitoring plan.	2012-2015	Create a monitoring schedule accordance with the approved plan.	Some people who drink water containing trihalomethanes and haloacetic acids in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have an increased risk of getting cancer.

### 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
<i>E. coli</i>	(In the year) 0		0	(0)	Human and animal fecal waste
Enterococci	(In the year) 0		TT	n/a	Human and animal fecal waste
Coliphage	(In the year) 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
NONE				



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

**TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES**

Treatment Technique <sup>(a)</sup> (Type of approved filtration technology used)	See attached AVEK Water Quality Report.
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 ____ NTU in 95% of measurements in a month. 2 – Not exceed ____ NTU for more than eight consecutive hours. 3 – Not exceed ____ NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	
Highest single turbidity measurement during the year	
Number of violations of any surface water treatment requirements	

(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

VIOLATION OF A SURFACE WATER TT				
TT Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
See attached AVEK Water Quality Report.				

### Summary Information for Operating Under a Variance or Exemption

No Variance or Exemption.

### 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 [NOT APPLICABLE] Level 1 assessment(s). [NOT APPLICABLE] Level 1 assessment(s) were completed. In addition, we were required to take [NOT APPLICABLE] corrective actions and we completed [NOT APPLICABLE] of these actions.

During the past year [NOT APPLICABLE] Level 2 assessments were required to be completed for our water system. [NOT APPLICABLE] Level 2 assessments were completed. In addition, we were required to take [NOT APPLICABLE] corrective actions and we completed [NOT APPLICABLE] of these actions.

**NONE**

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

*E. coli* are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely-compromised immune systems. We found *E. coli* bacteria, indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) identify problems and to correct any problems that were found during these assessments.

We were required to complete a Level 2 assessment because we found *E. coli* in our water system. In addition, we were required to take [NOT APPLICABLE] corrective actions and we completed [NOT APPLICABLE] of these actions.

# **Water Conservation Tips:**

1. Check Faucets and pipes for leaks. A small leak can waste 20 gallons per day.
2. Don't flush toilet to dispose of cigarettes or facial tissue. 5-7 gallons of water used each flush.
3. Use your water meter to check for leaks outside. Check meter read then use no water for 2 hours and then recheck to see if your meter has advanced.
4. Install water saving showerheads.
5. Short showers use less water than a bath in the tub.
6. Turn off water while brushing your teeth or cleaning vegetables.
7. Don't run the hose while washing your car.
8. Plant drought-resistant lawns, shrubs and plants.
9. Put a layer of mulch around trees and plants.
10. Keeps weeds out of gardens and flower beds; weeds take water from the good plants.
11. Sweep driveways, sidewalks and steps instead of hosing them off.
12. Avoid watering lawns when the wind is excessive, or during the hot part of the day.

**Check the internet for more water saving ideas, water conservation is vitally important.**



**Health Effects Language for Constituents Tested:****Table 4 - Primary Drinking Water Standards**

**Nitrate-** Infants below the age of six months who drink water containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women.

**Flouride-** Some people who drink water containing fluoride in excess of the federal MCL of 4 mg/L over many years may get bone disease, including pain and tenderness of the bones. Children who drink water containing fluoride in excess of the state MCL of 2 mg/L may get mottled teeth.

**Gross Alpha-** Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

**Uranium-** Some people who drink water containing uranium in excess of the MCL over many years may have kidney problems or an increased risk of getting cancer.

**Table 5- Secondary Water Standards**

**Color Units-** There are no PHGs, MCLGs, or mandatory standard health effects language for this constituent because secondary MCLs are set on the basis of aesthetics.

**Odor Threshold-** There are no PHGs, MCLGs, or mandatory standard health effects language for this constituent because secondary MCLs are set on the basis of aesthetics.

**Turbidity-** Turbidity has no health effects. However, high levels of turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

**Total Dissolved Solids-** There are no PHGs, MCLGs, or mandatory standard health effects language for this constituent because secondary MCLs are set on the basis of aesthetics.

**Magnesium-** The notification level for manganese is used to protect consumers from neurological effects. High levels of manganese in people have been shown to result in effects of the nervous system.

**Iron-** There are no PHGs, MCLGs, or mandatory standard health effects language for this constituent because secondary MCLs are set on the basis of aesthetics.



**Sulfate-** There are no PHGs, MCLGs, or mandatory standard health effects language for this constituent because secondary MCLs are set on the basis of aesthetics.

**Chloride-** There are no PHGs, MCLGs, or mandatory standard health effects language for this constituent because secondary MCLs are set on the basis of aesthetics.

**Specific Conductance-** There are no PHGs, MCLGs, or mandatory standard health effects language for this constituent because secondary MCLs are set on the basis of aesthetics.

# **ANTELOPE VALLEY – EAST KERN WATER AGENCY**

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## **2018 ANNUAL WATER QUALITY REPORT** ***LOS ANGELES COUNTY SYSTEM***

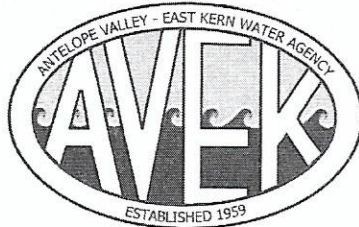


OFFICERS

DWAYNE CHISAM, P.E.  
General Manager  
and Chief Engineer

MATTHEW KNUDSON  
Assistant General Manager

HOLLY H. HUGHES  
Secretary-Treasurer



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March 7, 2019

Dear General Manager:

This is the 2018 Annual Water Quality Report from the Antelope Valley-East Kern Water Agency (AVEK). Since the water you obtain from AVEK represents one of your sources of water, we have included a summary of results for all analyses completed in 2018 for your convenience. If you find that you need copies of individual monitoring reports please feel free to contact me and I will be happy to provide those for you.

In accordance with the Consumer Confidence Report (CCR) guidance manuals issued by the State Water Resources Control Board and the United States Environmental Protection Agency, we are herein providing you with the monitoring data and other information you will need to produce your CCR.

AVEK provides some treated water to our customers in Acton by way of an intertie with Palmdale Water District (PWD). AVEK monitors the treated water quality provided by PWD at our Acton Water Treatment Plant before it reaches our first customer. The results of this monitoring have been included in this report. If you have specific questions regarding the quality of the raw water treated by Palmdale Water District, please contact them directly.

If you have any questions or need additional information, please call me at 661-943-3201. However, please do not designate AVEK or this office as your contact in your CCR. According to the State Board and EPA guidelines, the designated contact person should be someone from your system. While we are always happy to answer questions about AVEK water, we do not have the specific information necessary to answer questions about your water, blending practices or distribution systems.

Respectfully,



Jordan Wray  
Laboratory Director

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(661) 943-3201 • [www.avek.org](http://www.avek.org) • [info@avek.org](mailto:info@avek.org)

*The mission of AVEK is to deliver reliable, sustainable and high quality supplemental water to the region in a cost-effective and efficient manner.*

## ***Antelope Valley-East Kern Water Agency***

### **2018 Annual Water Quality Report**

We are pleased to provide you with this year's Annual Water Quality Report. We want to keep you informed about the excellent water we have delivered to you over the past year. Our goal is, and always has been, to provide to you a safe supply of drinking water.

Our main water source is the State Water Project, California Aqueduct. The State Water Resources Control Board (State Board) has assessed the vulnerability of the State Water Project as to possible contaminating activities. The assessment's description and discussion of vulnerability is as follows:

"The California Aqueduct originates at the Sacramento-San Joaquin Delta at Clifton Court Forebay. Water in the Delta originates in the Sacramento River watershed, the San Joaquin watershed, and the watershed drainage from the Mokelumne River, Stanislaus River, Merced River and several smaller rivers that drain the eastern slopes of the Sierra Nevadas. Located in these drainage areas are a broad variety of potential sources of contamination including municipal, industrial and agricultural activities. Also influencing the quality of water pumped from the Delta is the impact of the estuarial nature of the Delta and the naturally occurring salt-water intrusion which is dependent to a large extent on the inflow from the contributing rivers.

The possible contaminating activities present within the California Aqueduct watershed are described in the State Water Project Watershed Sanitary Survey conducted by the California Department of Water Resources and their consultants in 1990 and updated in 2016."

Our alternative water source is State Water Project water which has been stored in the aquifer at various underground storage facilities (i.e. "water banks") and is recovered for water quality purposes or supply purposes during times of drought. The vulnerability of the facilities was assessed in 2014 as follows:

"The wells are most vulnerable to contaminants from activities such as herbicide use along transportation corridors or road right-of-ways; agricultural/irrigation wells; irrigated crops; application of fertilizer, pesticides, and herbicides; agricultural drainage; and the raw State Water Project surface water used to recharge the groundwater basins. Other potential contaminating activities include the potential presence of certain unknown activities such as unregistered underground storage tanks."

A copy of these assessments may be viewed at, Antelope Valley-East Kern Water Agency, 6500 West Avenue N, Palmdale, CA 93551.

If you have any questions about this report or the Antelope Valley-East Kern Water Agency, please contact Jordan Wray, Laboratory Director at 661-943-3201. We want our valued customers to be informed about our Water Agency. If you want to learn more, please attend any of our regularly scheduled Board meetings. They are held on the second and fourth Tuesday of every month, 6:30 PM, at the Antelope Valley-East Kern Water Agency Office, 6450 West Avenue N, Palmdale, CA, 93551.



Antelope Valley-East Kern Water Agency routinely monitors for contaminants in our drinking water according to Federal and State laws. The table in this report, "2018 Annual Water Quality Report", shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2018.

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It is important to remember that the presence of these contaminants does not necessarily pose a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

We have learned through our monitoring and testing that some contaminants have been detected, however, we are proud to report that our drinking water meets all State and Federal requirements.

**Total Coliform:** Water systems are required to meet a strict standard for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If the standard is exceeded, the water supplier must notify the public by newspaper, television or radio.

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. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

**Antelope Valley-East Kern Water Agency**  
**2018 Annual Water Quality Report - Los Angeles County System**

The Antelope Valley-East Kern Water Agency provides treated surface water as a source 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 groundwater as a 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: **0.00**

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

The Groundwater Rule states that a system has 4 hours to re-establish chlorine residual if it drops below 0.5 mg/L. Residual was 0.00 mg/L for approximately 1.5 hours.

**MICROBIOLOGICAL CONTAMINANTS**

Type of Sample(s)	Parameter	Sampling Frequency	MCL	No. of Months in Violation	System Results	
Distribution	Total Coliform Bacteria	123 - 155 / mo	5% positive	None	Range	Average
Distribution	Fecal Coliform/E. coli	123 - 155 / mo	1 pos. with 2 TC pos.	None	0%	0%

**INORGANIC CONTAMINANTS**

**RESULTS**

Parameter	Units	MCL	DLR	PHG or (MCLG)	Acton Plant Effluent (CWR)		Eastside Plant Effluent (CWR)		Quartz Hill Plant Effluent (CWR)		Raw Influent (State Water Project)		Water Bank Effluent (CWR)		Wells	
					Range	Average	Range	Average	Range	Average	Range	Average	Range	Average	Range	Average
Aluminum	µg/L	1000	50	600	ND	ND	ND	ND	ND-80	6.7	ND	ND	ND	ND	ND	ND
Antimony	µg/L	6	6	1	ND	ND	ND	ND	ND	ND	ND	ND	3.4-5.6	4.3	ND	ND
Arsenic	µg/L	10	2	0.004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.4-18	5.0
Barium	µg/L	1000	100	2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	36-90	65
Beryllium	µg/L	4	1	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Cadmium	µg/L	5	1	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Chromium (Total)	µg/L	50	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.6-5.7	3.3
Chromium (Hexavalent)	µg/L	*	1	0.02	ND	2.4	ND	ND	ND	ND	ND	ND	ND	ND	1.5-6.1	3.1
Cyanide	µg/L	150	100	150	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Fluoride	mg/L	2	0.1	1	0.12	0.10	ND	ND	ND	ND	ND	ND	0.14-0.30	0.20	ND	ND
Lead	µg/L	15	5.0	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND-1.10	0.73	ND	ND
Mercury	µg/L	2	1	1.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nickel	µg/L	100	10	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND-15	3.1
Nitrate (as N)	mg/L	10	0.4	10	ND	0.76	ND	ND	ND	ND	ND-0.47	0.16	0.42-7.4	4.3	ND	ND
Nitrite (as N)	mg/L	1	0.4	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nitrate+Nitrite (as N)	mg/L	10	10	10	ND	0.76	ND	ND	ND	ND	ND	ND	1.5-4.4	3.3	ND	ND
Perchlorate	µg/L	6	4	1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Selenium	µg/L	50	5	30	ND	ND	ND	ND	ND	ND	ND	ND	ND-9.7	2.8	ND	ND
Thallium	µg/L	2	1	0.1	ND	ND	ND	ND	ND	ND	ND	ND	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.

**GENERAL PHYSICAL AND SECONDARY STANDARDS**

**RESULTS**

Parameter	Units	MCL	DLR	Acton Plant Effluent (CWR)		Eastside Plant Effluent (CWR)		Quartz Hill Plant Effluent (CWR)		Raw Influent (State Water Project)		Water Bank Wells	
				Range	Average	Range	Average	Range	Average	Range	Average	Range	Average
Aluminum	µg/L	200	50	ND	ND	ND	ND	ND-80	6.7	ND	ND	ND	ND
Calcium	mg/L	no standard		23	33	33	33	17	17	17	17	51-110	85
Chloride	mg/L	250		120	62	62	62	120	110	110	110	21-120	68



				Action Plant Effluent (CWR)		Eastside Plant Effluent (CWR)		Quartz Hill Plant Effluent (CWR)		Raw Influent (State Water Project)		Water Bank Wells	
Parameter	Units	MCL	DLR	Range	Average	Range	Average	Range	Average	Range	Average	Range	Average
Color	Units	15		<5	<5	<5	<5	<5	<5		10	<5	<5
Copper	µg/L	1000	50		ND		ND		ND		50	ND-7.1	2.8
Foaming Agents (MBAS)	mg/L	0.5			ND		ND		ND		ND	ND	ND
Hardness (Total) as CaCO3	mg/L	no standard			110		120		100		100	150-330	230
Iron	µg/L	300	100		ND		ND	ND-420	210		ND	ND-160	23
Magnesium	mg/L	no standard			12		8.0		14		14	2.0-13	7.9
Manganese	µg/L	50	20		ND		ND		ND		ND	ND-6.4	1.6
Odor @ 60 C	Units	3	1	<1	<1	<1	<1	<1	<1		<1	<1	<1
pH	Units	no standard		6.8-8.1	7.16	6.4-8.0	7.19	6.7-7.2	6.94	7.4-9.5	8.29	7.3-7.7	7.53
Silver	µg/L	100	10		ND		ND		ND		ND	ND	ND
Sodium	mg/L	no standard			69		52		72		70	33-55	43
Specific Conductance	µmhos	900		550-570	560	470-480	430	320-600	460	290-580	450	480-1000	720
Sulfate	mg/L	250	0.5		35		47		44		24	36-92	59
Thiobencarb (Bolero)	µg/L	1	1		ND		ND		ND		ND	ND	ND
Methyl tert-Butyl Ether (MTBE)	µg/L	5	3		ND		ND		ND		ND	ND	ND
Total Dissolved Solids	mg/L	500			300		260		290		290	280-560	420
Turbidity	Units	5		0.02-0.14	0.04	0.01-0.19	0.04	0.02-0.12	0.06	0.16-102.0	2.63	0.02-3.77	0.84
Zinc	µg/L	5000	50		490		230		620		ND	ND	ND
Total Alkalinity (as CaCO3)	mg/L	no standard			57		80		48	56-74	68	140-200	160
Bicarbonate Alkalinity(as HCO3)	mg/L	no standard			70		97		59		82	170-220	190
Carbonate (as CO3)	mg/L	no standard			ND		ND		ND		ND	ND	ND
Hydroxide (as OH)	mg/L	no standard			ND		ND		ND		ND	ND	ND

## RADIOLOGICAL CONTAMINANTS

Parameter	Units	MCL	DLR	PHG
Gross Alpha	pCi/L	15	3	
Gross Beta	pCi/L	50	4	
Strontium 90	pCi/L	8	2	0.35
Triium	pCi/L	20,000	1,000	400
Uranium	pCi/L	20		0.43
Radium 228	pCi/L		1	0.019
Radium 226	pCi/L		1	0.05

## RESULTS

Raw Influent (State Water Project)	Water Bank Wells
	<u>Range</u> <u>Average</u>
	ND-5.0      1.2
	ND-4.8      2.8
	ND      ND
	ND      ND
	3.1-7.1      5.0
	ND-0.56      0.14
	ND-0.35      0.16

## VOLATILE ORGANIC CONTAMINANTS

Parameter	Units	MCL	DLR	PHG
1,1,1-Trichloroethane (1,1,1-TCA)	µg/L	200	0.5	1000
1,1,2,2-Tetrachloroethane	µg/L	1	0.5	0.1
1,1,2-Trichloroethane (1,1,2-TCA)	µg/L	5	0.5	0.3
1,1-Dichloroethane (1,1-DCA)	µg/L	5	0.5	3
1,1-Dichloroethylene (1,1-DCE)	µg/L	6	0.5	10
1,2,4-Trichlorobenzene	µg/L	5	0.5	5
1,2-Dichlorobenzene (o-DCB)	µg/L	600	0.5	600
1,2-Dichloroethane (1,2-DCA)	µg/L	0.5	0.5	0.4
1,2-Dichloropropane	µg/L	5	0.5	0.5
1,3-Dichloropropene (Total)	µg/L	0.5	0.5	0.2
1,4-Dichlorobenzene (p-DCB)	µg/L	5	0.5	6
Benzene	µg/L	1	0.5	0.15
Carbon tetrachloride	µg/L	0.5	0.5	0.1
cis-1,2-Dichloroethylene (c-1,2-DCE)	µg/L	6	0.5	100
cis-1,3-Dichloropropene	µg/L			
Dichloromethane (Methylene Chloride)	µg/L	5	0.5	4
Ethylbenzene	µg/L	300	0.5	300
Methyl-tert-butyl ether (MTBE)	µg/L	13	3	13
Monochlorobenzene (Chlorobenzene)	µg/L	70	0.5	70
Styrene	µg/L	100	0.5	0.5

## RESULTS

[illegible]

**Antelope Valley-East Kern Water Agency**  
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Parameter	Units	MCL	DLR	PHG	State Water Project Average	Water Bank Wells Range	Average
Tetrachloroethylene (PCE)	µg/L	5	0.5	0.06	ND	ND	ND
Toluene	µg/L	150	0.5	150	ND	ND	ND
trans-1,2-Dichloroethylene (t-1,2-DCE)	µg/L	10	0.5	60	ND	ND	ND
trans-1,3-Dichloropropene	µg/L				ND	ND	ND
Trichloroethylene (TCE)	µg/L	5	0.5	1.7	ND	ND	ND
Trichlorofluoromethane (Freon11)	µg/L	150	5	1300	ND	ND	ND
Trichlorotrifluoroethane (Freon 113)	µg/L	1200	10	4000	ND	ND	ND
Vinyl Chloride (VC)	µg/L	0.5	0.5	0.05	ND	ND	ND
Xylenes (Total)	µg/L	1750	0.5	1800	ND	ND	ND

**SYNTHETIC ORGANIC CHEMICALS**

Parameter	Units	MCL	DLR (DL)	PHG	State Water Project Range	Average	Water Bank Wells Range	Average
Alachlor	µg/L	2	1	4	ND	ND	ND	ND
Atrazine	µg/L	1	0.5	0.15	ND	ND	ND	ND
Bentazon	µg/L	18	2	200	ND	ND	ND	ND
Benzo(a)pyrene	µg/L	0.2	0.1	0.007	ND	ND	ND	ND
Carbofuran	µg/L	18	5	0.7	ND	ND	ND	ND
Chlordane	µg/L	0.1	0.1	0.03	ND	ND	ND	ND
2,4-D	µg/L	70	10	20	ND	ND	ND	ND
Dalapon	µg/L	200	10	790	ND	ND	ND	ND
Dibromochloropropane (DBCP)	µg/L	0.2	0.01	0.0017	ND	ND	ND	ND
Di(2-ethylhexyl)adipate	µg/L	400	5	200	ND	ND	ND	ND
Di(2-ethylhexyl)phthalate	µg/L	4	3	12	ND	ND	ND	ND
Dinoseb	µg/L	7	2	14	ND	ND	ND	ND
Diquat	µg/L	20	4	6	ND	ND	ND	ND
Endothall	µg/L	100	45	94	ND	ND	ND	ND
Endrin	µg/L	2	0.1	0.3	ND	ND	ND	ND
Ethylene Dibromide (EDB)	µg/L	0.05	0.02	0.01	ND	ND	ND	ND
Glyphosate	µg/L	700	25	900	ND	ND	ND	ND
Heptachlor	µg/L	0.01	0.01	0.008	ND	ND	ND	ND
Heptachlor Epoxide	µg/L	0.01	0.01	0.006	ND	ND	ND	ND
Hexachlorobenzene	µg/L	1	0.5	0.03	ND	ND	ND	ND
Hexachlorocyclopentadiene	µg/L	50	1	2	ND	ND	ND	ND
Lindane	µg/L	0.2	0.2	0.032	ND	ND	ND	ND
Methoxychlor	µg/L	30	10	0.09	ND	ND	ND	ND
Molinate	µg/L	20	2	1	ND	ND	ND	ND
Oxamyl	µg/L	50	20	26	ND	ND	ND	ND
Pentachlorophenol	µg/L	1	0.2	0.3	ND	ND	ND	ND
Picloram	µg/L	500	1	166	ND	ND	ND	ND
Polychlorinated Biphenyls	µg/L	0.5	0.5	0.09	ND	ND	ND	ND
Simazine	µg/L	4	1	4	ND	ND	ND	ND
Thiobencarb (Bolero)	µg/L	70	1	42	ND	ND	ND	ND
Toxaphene	µg/L	3	1	0.03	ND	ND	ND	ND
2,3,7,8-TCDD (Dioxin)	pg/L	30	5	0.05	ND	ND	ND	ND
2,4,5-TP (Silvex)	µg/L	50	1	3	ND	ND	ND	ND
1,2,3-Trichloropropane	µg/L	0.005	0.005	0.0007	ND	ND	ND	ND

**DISINFECTION RESIDUAL, PRECURSORS, and BYPRODUCTS**

Type of Sample(s)	Parameter	Units	MCL/MRDL	DLR	MRDLG	RESULTS Range	Average
Distribution	Chlorine (as total Cl2)	mg/L	4.0		4	0.27-1.68	1.04
Treated Water	Total Organic Carbon (TOC)	mg/L	Treatment Requirement	0.3		1.1-2.7	1.8
State Water Project	Total Organic Carbon (TOC)	mg/L	Treatment Requirement	0.3		1.9-4.5	2.9
Distribution	Stage 2 D/DBP Rule Total Trihalomethanes	µg/L	80**			1.5-72	42 #
Distribution	Stage 2 D/DBP Rule Total Haloacetic Acids	µg/L	60**			ND - 26	17 #
Treated Water	Bromate	µg/L	10*	5		ND - 7.0	1.9

\*\* 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.



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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 exceed 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.

**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.







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

System Name: Antelope Valley-East Kern Water Agency System No.: 1910045 Year: 2018 Quarter: 4th

	2017				1st Qtr.				2nd Qtr.				3rd Qtr.				4th Qtr.			
Sample Date (month/date):	1st Q	2nd Q	3rd Q	4th Q	1/10	2/14	3/14	Quarterly Average	4/11	5/9	6/13	Quarterly Average	7/11	8/8	9/12	Quarterly Average	10/10	11/14	12/12	Quarterly Average
Site 1 - QHWP	0.0	0.0	1.3	1.1	OFF	OFF	OFF	0.0	ND	OFF	ND	0.0	5.8	5.1	7.0	6.0	6.8	ND	OFF	2.3
Site 2 - EWTP	0.0	0.0	0.0	1.0	ND	OFF	OFF	0.0	OFF	ND	ND	0.0	4.3	4.9	4.8	4.7	3.6	4.0	ND	2.5
Site 3 - AWTP	OFF	OFF	OFF	OFF	OFF	OFF	OFF		OFF	OFF	OFF		OFF							
System Quarterly Average	0.0	0.0	0.7	1.1				0.0				0.0				5.3				2.4

Running Annual Average				0.4				0.4				0.4				1.6				1.9
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Meets Standard?*								Yes <input checked="" type="checkbox"/>				Yes <input checked="" type="checkbox"/>				Yes <input checked="" type="checkbox"/>				Yes <input checked="" type="checkbox"/>
(check box)								No <input type="checkbox"/>				No <input type="checkbox"/>				No <input type="checkbox"/>				No <input type="checkbox"/>

Identify the sample locations in the table below.

Site	Sample Location
1	Quartz Hill Clear Well Reservoir
2	Eastside Clear Well Reservoir
3	Acton Clear Well Reservoir

Comments: Samples collected at the entry point to the distribution system for each treatment plant using ozone. "OFF" denotes treatment plant shutdown or ozone system shutdown.

Signature

1/10/2019  
Date

\*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.: 1910045

Calendar Year: 2018

Quarter: 4TH

1st Quarter		
Month	Number of Samples Taken	Monthly Ave. Chlorine Level (mg/L)
April		1.04
May		1.07
June		1.07
July		1.09
August		1.14
September		1.15
October		1.12
November		1.02
December		1.03
Previous Year		
January	155	1.00
February	123	0.99
March	124	1.01
Running Annual Average (RAA):		1.06
Meets standard? (i.e. RAA < MRDL of 4.0 mg/L as Cl <sub>2</sub> )		YES

2nd Quarter		
Month	Number of Samples Taken	Monthly Ave. Chlorine Level (mg/L)
July		1.09
August		1.14
September		1.15
October		1.12
November		1.02
December		1.03
Previous Year		
January		1.00
February		0.99
March		1.01
Current Year		
April	130	1.03
May	149	1.02
June	124	1.05
Running Annual Average (RAA):		1.05
Meets standard? (i.e. RAA < MRDL of 4.0 mg/L as Cl <sub>2</sub> )		YES

3rd Quarter		
Month	Number of Samples Taken	Monthly Ave. Chlorine Level (mg/L)
October		1.12
November		1.02
December		1.03
Previous Year		
January		1.00
February		0.99
March		1.01
April		1.03
May		1.02
June		1.05
Current Year		
July	155	1.05
August	124	1.12
September	124	1.06
Running Annual Average (RAA):		1.04
Meets standard? (i.e. RAA < MRDL of 4.0 mg/L as Cl <sub>2</sub> )		YES

4th Quarter		
Month	Number of Samples Taken	Monthly Ave. Chlorine Level (mg/L)
January		1.00
February		0.99
March		1.01
April		1.03
May		1.02
June		1.05
July		1.05
August		1.12
September		1.06
Previous Year		
October	155	1.02
November	124	1.10
December	124	1.04
Running Annual Average (RAA):		1.04
Meets standard? (i.e. RAA < MRDL of 4.0 mg/L as Cl <sub>2</sub> )		YES

Comments:

Signature: 

Date: 1/10/2019

Antelope Valley-East Kern Water Agency  
LA System No. 1910045  
TOC Removal Running Annual Average

Sample Date	Plant	Alkalinity mgCaCO3/L	Raw TOC mg/L	Treated TOC mg/L	Actual % TOC reduction	Required % TOC reduction	"TOC Removal Ratio" actual % /required %
1/10/2018	QHWTP	71.2	3.20	1.77	44.7	25	1.8
"	EWTP	70.6	3.23	1.99	38.4	25	1.5
"	AWTP	plant off					
2/14/2018	QHWTP	74.5	3.98	2.31	42.0	25	1.7
"	EWTP	plant off					
"	AWTP	plant off					
3/14/2018	QHWTP	73.9	2.60	1.64	36.9	25	1.5
"	EWTP	plant off					
"	AWTP	plant off					
4/11/2018	QHWTP	81.5	4.54	2.73	39.9	35	1.1
"	EWTP	plant off					
"	AWTP	plant off					
5/9/2018	QHWTP	56.3	3.62	1.97	45.6	35	1.3
5/7/2018	EWTP	60.6	3.86	2.29	40.7	25	1.6
"	AWTP	plant off					
6/13/2018	QHWTP	60.9	3.43	1.87	45.5	25	1.8
"	EWTP	62.2	3.75	2.35	37.3	25	1.5
"	AWTP	plant off					
7/11/2018	QHWTP	70.6	3.36	2.02	39.9	25	1.6
"	EWTP	71.5	3.63	2.34	35.5	25	1.4
"	AWTP	plant off					
8/8/2018	QHWTP	66.9	2.90	1.78	38.6	25	1.5
"	EWTP	64.6	2.99	1.87	37.5	25	1.5
"	AWTP	plant off					
9/12/2018	QHWTP	66.4	2.12	1.40	34.0	25	1.4
"	EWTP	64.7	2.38	1.51	36.6	25	1.5
"	AWTP	plant off					
10/10/2018	QHWTP	72.4	1.95	1.23	36.9	25	1.5
"	EWTP	73.4	2.02	1.39	31.2	25	1.2
"	AWTP	plant off					
11/14/2018	QHWTP	67.9	1.85	1.13	38.9	25	1.6
"	EWTP	67.9	1.95	1.32	32.3	25	1.3
"	AWTP	plant off					
12/12/2018	QHWTP	68.9	2.27	1.40	38.3	25	1.5
"	EWTP	68.5	2.31	1.54	33.3	25	1.3
"	AWTP	plant off					
Minimum		56.3	1.9	1.1	31.2		
Maximum		81.5	4.5	2.7	45.6		
RAA		68.4	2.9	1.8	38.3		

**Running Annual Average (RAA) 1.5**

**Title 22 California Code of Regulations, Chapter 15.5, Article 5:**

Required percent TOC reduction\*\*

Raw TOC	Source Water Alkalinity		
	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 54636.4(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. 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)