2016 Consumer Confidence Report

The Landale Mutual Water Company

June 1, 2017

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, 2015 and may include earlier monitoring data. We are pleased to report to you that our water meets and exceeds all federal and state requirements.

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.

During 2016, 100 percent of the water delivered in the Landale area consisted of groundwater pumped from the Landale Mutual Water Company well located at 509 East Ave L-8, Lancaster, CA. During 2016, no treated surface water was purchased from the Antelope Valley-East Kern Water Agency (AVEK). AVEK imports State Water Project water from the Sacramento River/San Joaquin Delta. This water supply is treated by AVEK at their Quartz Hill Treatment Plant. AVEK treats its source water by using conventional treatment methods, which include coagulation, flocculation, sedimentation and filtration. AVEK uses chlorine for disinfection because of its ability to kill microorganisms, such as bacteria, in the water and reduce the potential for their regrowth in the distribution pipes. AVEK provides a back-up source of water for Landale Mutual Water Company periodically as required by maintenance or repair of Landale's facilities. The amount of water provided by AVEK varies from year to year.

If you have any questions about this report or concerning your mutual water company, please leave a message for Nickie Purcell with the Landale Mutual Water Company answering service at (661) 949-0286. The regularly scheduled meetings of the Board of Directors are on the second Tuesday of each month at 6:00 p.m. at the well site at 509 East Ave L-8, Lancaster, CA.

An assessment of the drinking water source for the Landale Mutual Water Company's water system was completed in 2002. A copy may be requested by leaving a message for Nickie Purcell with the Landale Mutual Water Company answering service at (661) 949-0286. There is NO vulnerability to chemicals and NO chemicals were detected that will affect the quality of the drinking water. However, the source is considered most vulnerable to the following: high density septic tank installations.

ADDITIONAL GENERAL INFORMATION ON DRINKING WATER.

Not all portions of these messages necessarily apply to Landale Mutual Water Company's groundwater.

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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the US EPA's Safe Drinking Water Hotline at (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).

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. Landale Mutual Water 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 or at http://www.epa.gov/safewater/lead.

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 plant, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water 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 storm water runoff, agricultural application, and septic systems.
- Radioactive contaminants, which 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.

TERMS AND ABBREVIATIONS THAT MAY BE USED IN

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 Standard (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.

Regulatory Action Level (AL) The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) A required process intended to reduce the level of a contaminant in drinking water.

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 (ug/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 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 Department 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.

SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA

Microbiological Contaminants (to be completed only if there was a detection of bacteria)	Highest No. of detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria
Total Coliform Bacteria	(In a mo.) 0	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or *E. coli*	(In the year) 0	0	A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or *E. coli*	0	Human and animal fecal waste
E. Coli (federal revised Total Coliform Rule)	(from 04/01/16 to 12/31/16)	0	(a)	0	Human and animal fecal waste

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

SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER

Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of samples collected	90th percentile level detected	No. Sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	03-22-16	20	0	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.
Copper (ppm)	03-22-16	20	0.008	0	1.3	0.3	Internal corrosion of household water plumbing systems; erosion of natural deposits; leaching from wood preservatives.

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)	10-29-13	42.4		none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	10-29-13	39.0		none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

-**Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided on the next page.*

DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Notification Level	Health Effects Language
Vanadium	10-29-13	30.0	50 ppb	The babies of some pregnant women who drink water containing vanadium in excess of the notification level may have an increased risk of developmental effects, based on studies in laboratory animals

**Any violation of an MCL, MRDL or TT is asterisked. Additional information regarding the violation is provided below.*

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**
Arsenic (ppb)	10-29-13	5.0		10.0	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Chromium (ppb)	10-29-13	11.0		50	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Fluoride (ppm)	10-29-13	0.382		2.0	1.0	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Hexavalent Chromium (ppb)	03-16-16	8.72		10	0.02	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits
Nitrate (ppm) (as nitrate, NO_3)	04-28-16	1.16		45.0	45.0	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
TTHMs (Total Trihalomethanes) (ppb)	09-03-14	2.54		80	(N/A)	By-product of drinking water chlorination
Haloacetic Acids (ppb)	09-03-14	8.33		60	(N/A)	Byproduct of drinking water disinfection
Chlorine (ppm)	10-29-13	1.13		[MRDL = 4.0 (as Cl_2)]	[MRDLG = 4 (as Cl_2)]	Drinking water disinfectant added for treatment
Combined Radium 226 & 228 (pCi/L)	11-02-11	0.107		5	0	Erosion of natural deposits
Uranium (pCi/l)	11-02-11	0.78		20	0.43	Erosion of natural deposits
Gross Alpha (pCi/l)	11-02-11	0.5		15	0	Erosion of natural deposits

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**
Chloride (ppm)	10-29-13	2.69		500.0	N/A	Runoff/leaching from natural deposits; seawater influence
Color (units)	10-29-13	10		15	N/A	Naturally-occurring organic materials
Sulfate (ppm)	10-29-13	0.0141		500.0	N/A	Runoff/leaching from natural deposits; industrial wastes
Specific Conductance (uS/cm)	10-29-13	201		1600	N/A	Substances that form ions when in water; seawater influence
Turbidity (units)	10-29-13	0.515		5.0	N/A	Soil runoff
Total Dissolved Solids (ppm)	10-29-13	136		1000	N/A	Runoff/leaching from natural deposits

For Systems Providing Ground Water as a Source of Drinking Water

(Refer to page 1, "Type of water source in use" to see if your source of water is surface water or groundwater)

SAMPLING RESULTS SHOWING FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLES					
Microbiological Contaminants (complete if fecal-indicator detected)	**Total No. of Detections**	**Sample Dates**	**MCL [MRDL]**	**PHG (MCLG) [MRDLG]**	**Typical Source of Contaminant**
E. coli	(In the year) 0	Monthly	0	(0)	Human and animal fecal waste
Enterococci	(In the year) 0	Monthly	TT	n/a	Human and animal fecal waste
Coliphage	(In the year) 0	Monthly	TT	n/a	Human and animal fecal waste

Water Saving Tips

Ways to Save Water Indoors

Check all faucets, pipes and toilets for leaks.

Install water saving showerheads and ultra-low-flush toilets.

Take shorter showers.

Never use your toilet as a wastebasket.

Turn off the water while brushing your teeth or shaving.

Defrost frozen food in the refrigerator.

Rinse vegetables in a full sink or pan of water.

Fully load your dishwasher.

Rinse dishes in a full sink or pan of water.

Wash full loads of clothes.

Ways to Save Water Outdoors

Don't over-water landscaping.

Water your lawn or garden early in the morning or late in evening.

Adjust sprinklers so that they don't water the sidewalk or street.

Don't water on cool, rainy or windy days.

Equip all hoses with shut-off nozzles.

Use drip irrigation systems.

Plant drought-tolerant or low water-use plants and grasses.

Use shrubs and ground cover to reduce the amount of grass.

Place mulch around plants to reduce evaporation and discourage weeds.

Set your mower blades one notch higher, since longer grass means less evaporation.

Use a pool cover to cut down on water evaporation.

Use a bucket instead of a hose to wash your car.

Use a broom rather than a hose to clean sidewalks, driveways, loading docks and parking lots.