

2015 ANNUAL DRINKING WATER QUALITY REPORT



Water System Name: City of Kerman

Report Date: 4-1-2016

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.

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

**ਇਹ ਸੂਚਨਾ ਮਹੱਤਵਪੂਰਣ ਹੈ ।
ਕ੍ਰਿਪਾ ਕਰਕੇ ਕਿਸੀ ਤੋਂ ਇਸ ਦਾ ਅਨੁਵਾਦ ਕਰਾਉ ।**

Type of water source in use: Ground Water Wells

Name and general location of sources: Well #9A (Del Norte & C St), Well #10 (Vineland & E St.), Well #12 (Industrial Way), Well #14 (Vineland & Whitesbridge), Well #15 (15201 W. California), Well #17 (920 Goldenrod)

Drinking Water Source Assessment information: Well #9A. The source is considered most vulnerable to the following activities associated with contaminants detected in the water supply: metal plating/finishing/fabricating, automobile-repair shops, utility stations-maintenance areas, schools, office buildings/complexes, RV/mini storage. The source is considered most vulnerable to the following activities not associated with any detected contaminants: Septic systems-low density [<1 /acre], Sewer collection systems. Well# 15. The source is considered most vulnerable to the following activities with contaminants detected in the water supply; chemical/petroleum processing/storage, RV/mini storage, schools. The source is considered most vulnerable to the following activities not

associated with any detected contaminants: automobile-repair shops, farm chemical distributor/application service, junk/scrap/salvage yard, pesticide/fertilizer/petroleum storage/transfer areas, sewer collection systems, and wells-agricultural/irrigation. Well# 17. The source considered most vulnerable to the following activities not associated with any detected contaminants: septic systems-high [<1 /acre]. The drinking water source assessment was completed in 2012. A copy of the complete assessment is available at CDPH District Office at 265 W. Bullard Ave. Suite# 101, Fresno, CA. 93704. You may request a summary of the assessment be sent to you by contacting CDPH at (559) 447-3300.

Time and place of regularly scheduled board meetings for public participation: 1st and 3rd Wednesday of each month at 850 S. Madera Ave. Kerman, CA.

For more information, contact: Kenneth Moore
Phone: (559) 846-9343

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.

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:** Department permission

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. under certain conditions.

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 (μ g/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 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 and 5, 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.

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.) 1	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or <i>E. coli</i>	(In the year) 0	0	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

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	90th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	1/22/2015	30	ND	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	1/22/2015	30	ND	0	1.3	0.3	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)	12/2/2015	35.3	29-40	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	12/2/2015	26.8	15-42	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 informatin regarding the viaolatin is provided later in this report.

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
Uranium pCi/L	2/5/2014	2.9	0-10	20	0.43	Erosion of natural deposits
Nitrate mg/L	12/2/2015	1.38	1.5-1.8	10	10	Runoff and leaching from fertilizer use; Leaching from septic tanks and sewage; Erosion of natural deposits
Fluoride ppm	12/2/2015	0.11	.10 -.13	0.2	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Arsenic ppb	12/2/2015	5.5	3.3-7	10	0.004	Erosion of natural deposits, runoff from orchards, grass and electronics production waste
Chromium ppb	12/2/2015	27.1	20-31	50	-100	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Chromium Hexavalent ppb	10/21/2015	21.7	5.4-30	10	0.02	Discharge from electroplating factories,, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits

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
Chloride mg/L	12/2/2015	7.61	6.1-11	500	NA	Runoff/leaching from natural deposits; seawater influence
Sulfate mg/L	12/2/2015	3	2.7-3.3	500	NA	Runoff/leaching from natural deposits; Industrial waste
Specific Conductance	12/2/2015	203	190-230	1600	NA	Substances that form ions when in water; Sea

TABLE 6 – DETECTION OF RADIOLOGICAL CONSTITUENTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Gross Alpha pCi/L	12/2/2015	2.1	0-8.1	15	0	Erosion of natural deposits

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).

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. City of Kerman 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. 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>.

**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
Chromium Hexavalent ppb	Exceeded the MCL	on goin	applying for State funding to evaluate treatment options	Drinking water containing hexavalent chromium in excess of the MCL ov er many years may not have an increased risk of getting cancer