

2022 Consumer Confidence Report

Water System Information

Water System Name: CITY OF FIREBAUGH

Report Date: 10/4/2023

Type of Water Source(s) in Use: SIX GROUND WATER WELLS

Name and General Location of Source(s): WELLS 13, 15, 16 SERVE WATER TREATMENT PLANT 1, WELLS 11, 12 AND 17 SERVE WATER TREATMENT PLANT 2

Drinking Water Source Assessment Information: Source water assessment surveys for Wells 11, 12 and 13 which produce water for the City of Firebaugh Water System was conducted on July 1, 2002. A source water assessment survey was completed September 2012 for Wells #15 and #16. The State Water Resource Control Board Division of Drinking Water is currently working on the source water assessment for Well #17

WELL 11

The source is considered most vulnerable to the following activities not associated with any detected contaminants: surface water bodies, automobile-gas stations and septic systems-high density >1 acre. The city's water quality monitoring has not detected any contaminants that are associated with the identified Possible Contaminating Activities in the area. Naturally occurring arsenic is present in three of the wells and naturally occurring iron and manganese are present in all of the wells. The city provides treatment to reduce arsenic, iron, and manganese concentrations. The discharge from this well is blended with wells No. 12 and 17 prior to treatment

WELL 12

The source is considered most vulnerable to the following activities not associated with any detected contaminants: Surface water bodies, automobile-gas stations and septic systems-high >1 acre. The city's water quality monitoring has not detected any contaminants that are associated with the identified Possible Contaminating Activities in the area. Naturally occurring arsenic is present in three of the wells and naturally occurring iron and manganese are present in all of the wells. The city provides treatment to reduce arsenic, iron, and manganese concentrations. The discharge from this well is blended with wells No. 11 and 17 prior to treatment.

WELL 13

The source is considered most vulnerable to the following activities not associated with any detected contaminants: Surface water bodies, automobile-gas stations, landfill/dumps, waste water treatment plants and septic systems-higher density >1 acre. The city's water quality monitoring has not detected any contaminants that are associated with the identified Possible Contaminating Activities in the area. Naturally occurring arsenic is present in three of the wells and naturally occurring iron and manganese are present in all of the wells. The city provides treatment to reduce arsenic, iron, and manganese concentrations. The discharge from this well is blended with wells No. 10, 15 and 16 prior to treatment.

WELL 15

The source is considered most vulnerable to the following activities associated with contaminants detected in the water supply: Schools. The source is considered most vulnerable to the following activities not associated with any detected contaminants: Agricultural drainage. Manganese, arsenic, and iron were detected at levels above MCL. Iron and manganese are naturally occurring and were not associated with any PCA activities. Arsenic could be naturally occurring or the nearby school could be contributing to the arsenic contamination. All three contaminants are currently removed from the water supply via a treatment plant.

WELL 16

The source is considered most vulnerable to the following activities associated with contaminants detected in the water supply: Airports-maintenance fueling areas, automobile-body shops, automobile-repair shops, fleet/truck/bus terminals, junk/scrap/salvage yards, schools. The source is considered most vulnerable to the following activities not associated with contaminants detected in the water supply: historic gas stations. The water system's water quality monitoring has identified arsenic, manganese, and iron as testing above the MCL set for these constituents. The arsenic contamination was associated with 16 possible contaminating activities in the zones surrounding well 16. It is also possible that the Arsenic contamination could be naturally occurring. Iron was not associated with any possible contaminating activities and must be naturally occurring. All three contaminants are currently removed from the water supply via a treatment plant.

WELL 17

Under review

Time and Place of Regularly Scheduled Board Meetings for Public Participation: First and Third Mondays of each month at 6:00 pm. meetings are held at the Firebaugh Community Center 1655 13th Street, Firebaugh Ca. 93622

For More Information, Contact: Michael Molina (559) 659-2043

About This Report

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 to December 31, 2022 and may include earlier monitoring data.

Importance of This Report Statement in Five Non-English Languages (Spanish, Mandarin, Tagalog, Vietnamese, and Hmong)

Language in Spanish: Este informe contiene información muy importante sobre su agua para beber. Favor de comunicarse City of Firebaugh 1133 P Street Firebaugh Ca. 93622 (559) 659-2043 para asistirlo en español.

Terms Used in This Report

Term	Definition
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 <i>E. coli</i> MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
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).
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.
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.
Regulatory Action Level (AL)	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
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.
Variations and Exemptions	Permissions from the State Water Resources Control Board (State Board) 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)

Sources of Drinking Water and Contaminants that May Be Present in Source Water

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.

Regulation of Drinking Water and Bottled Water Quality

In order to ensure that tap water is safe to drink, the U.S. EPA and the State Board prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. The U.S. Food and Drug Administration regulations and California law also establish limits for contaminants in bottled water that provide the same protection for public health.

About Your Drinking Water Quality

Drinking Water Contaminants Detected

Tables 1, 2, 3, 4, 5, 6, and 8 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

Complete if bacteria are detected.

Microbiological Contaminants	Highest No. of Detections	No. of Months in Violation	MCL	MCLG	Typical Source of Bacteria
<i>E. coli</i>	0	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*.

Table 2. Sampling Results Showing the Detection of Lead and Copper

Complete if lead or copper is detected in the last sample set.

Lead and Copper	Sample Date	No. of Samples Collected	90 th Percentile Level Detected	No. Sites Exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	9/2021	20	0	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	9/2021	20	0.099	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)	2020-2022	148.5	91-270	None	None	Salt present in the water and is generally naturally occurring

Hardness (ppm)	2020-2022	172	52-290	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
ARSENIC (PPB) Treatment Plant #1 Treatment Plant #2	2022	7.22 5.06	2.5-*11 2.3-7.7	10	.004	Erosion of natural deposits; runoff from orchards; glass and electronics products wastes.
Chlorine (ppm) Distribution System Residual	2022	1.23	0.80-1.07	4	0	[Enter Source]
Barium (ppm)	2022	.143	0-.270	1	0	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride (ppm)	2022	.093	0-.270	2	1	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Gross Alpha (pCi/L)	2020-2022	3.80	0-6.23	15	(0)	Erosion of natural deposits
Selenium (ppb)	2020-2022	1.3	0-5.5	50	30	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
Turbidity (ntu)	2020-2022	1.3	0.18-2.2	5 units	N/A	Soil runoff

TTHM (PPB)	2021	51	48-54	80	N/A	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience liver, kidney, or central nervous system problems, and may have increased risk of getting cancer
HAA5 (PPB)	2021	9.2	8.4-10	60	N/A	Byproduct of drinking water disinfection

Table 5. Detection of Contaminants with a Secondary Drinking Water Standard

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	SMCL	PHG (MCLG)	Typical Source of Contaminant
Color (units)	2020-2022	13.33	5-20	15	N/A	Naturally-occurring organic materials
Conductivity (uhmos/cm)	2020-2022	1050	700-1600	1600	N/A	Substances that form ions when in water: sea water influence
Iron (ppb) Treatment Plant #1 Treatment Plant #2	2022	0.64 0	0- 33 0-0	30	N/A	Leaching from natural deposits. industrial waste
Manganese (ppb) Treatment Plant #1 Treatment Plant #2	2022	0 0	0-0 0-0	50	N/A	Leaching from natural deposits.
Sulfate (ppm)	2020-2022	71.33	0-120	500	N/A	Runoff/Leaching from natural deposits: industrial wastes
Total Dissolved Solids (ppm)	2020-2022	606	420-880	1000	N/A	Runoff/Leaching from natural deposits
Chloride (ppm)	2020-2022	178	130-310	500	N/A	Runoff/leaching from natural deposits: seawater influence

Table 6. Detection of Unregulated Contaminants

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects

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).

Arsenic

Some people who drink water containing arsenic in excess of the MCL over many years may experience skin damage or circulatory system problems, and may have an increased risk of getting cancer.

Lead-Specific Language: 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. [Enter Water System's Name] 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 (1-800-426-4791) or at <http://www.epa.gov/lead>.

State Revised Total Coliform Rule (RTCR): [Enter Additional Information Described in Instructions for SWS CCR Document]

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

Table 7. Violation of a MCL, MRDL, AL, TT or Monitoring Reporting Requirement

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
Arsenic	Treatment Site #1 exceeded the mcl of 10 ppb	5 weekly testing cycles out of the year	Staff evaluated and inspected the treatment technique used to remove arsenic. Filtration vessels were inspected and currently awaiting media sample analysis	Some people who drink water containing arsenic in excess of the MCL over many years may experience skin damage or circulatory system problems, and may have an increased risk of getting cancer.

For Water Systems Providing Groundwater as a Source of Drinking Water

Table 8. 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>	0	2022	0	(0)	Human and animal fecal waste
Enterococci	0	2022	TT	N/A	Human and animal fecal waste
Coliphage	0	2022	TT	N/A	Human and animal fecal waste

Summary Information for Fecal Indicator-Positive Groundwater Source Samples, Uncorrected Significant Deficiencies, or Violation of a Groundwater TT

Special Notice of Fecal Indicator-Positive Groundwater Source Sample: N/A

Special Notice for Uncorrected Significant Deficiencies: N/A

Table 9. Violation of Groundwater TT

Violation	Explanation	Duration	Actions Taken to Correct Violation	Health Effects Language
NONE				