

2013 Consumer Confidence Report

Water System Name: City of McFarland Report Date: 08/19/14

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, 2013 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: Deep Wells

Name & general location of source(s): Garzoli Well, Well 6, Taylor Well (Taylor Well was not online in 2013),
Browning Road Well

Drinking Water Source Assessment information: Total production for 2013 from the ground wells was 708.44 million gallons with the storage tank. The majority, 708.44 million gallons, were pumped from deep water bearing layers of exceptional quality.

Time and place of regularly scheduled board meetings for public participation: The first and last Thursday of each month at 6:00 pm at:
Veteran's Memorial Hall
103 W. Sherwood Avenue
McFarland, CA 93250

For more information, contact: Mario Gonzales, Public Works Director Phone: (661) 792-3091

TERMS USED IN THIS REPORT

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the U.S. Environmental Protection Agency (USEPA).

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant

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.

Variations and Exemptions: Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

ND: not detectable at testing limit

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (µg/L)

ppt: parts per trillion or nanograms per liter (ng/L)

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.

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 California Department of Public Health (Department) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. Department regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

Tables 1, 2, 3, 4, 5, 7, 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 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.

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	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>	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	90 th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	2012	30	1.9	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	2012	30	.019	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)						
Garzoli Well	2010	44	44	None	None	Salt present in the water and is generally naturally occurring
Well 6	2010	78	78	None	None	
Hardness (ppm)						
Garzoli Well	2010	7.49	7.49	None	None	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring
Well 6	2010	12.5	12.5	None	None	

*Any violation of an MCL or AL is asterisked. Additional information regarding the violation 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
Radium (pCi/L)						
Garzoli Well	2012	0.00	1	5	(0)	Presence of radioactive substances on surface or within solids, liquids or gases; erosion of natural deposits
Well 6	2012	0.00	1	5	(0)	
Browning Road Well	2013	0.137	1	5	(0)	
Aluminum (ppm)						
Garzoli Well	2013	40	40	1	0.6	Residue from some surface water treatment process; erosion of natural deposits
Well 6	2010	30	30	1	0.6	
Arsenic (ppb) (1)						
Garzoli Well	2013	12	4-12	10	0.004	Runoff from orchards; glass and electronics production wastes; erosion of natural deposits
Well 6	2013	10	9-10	10	0.004	
Browning Road Well	2013	4	3-4	10	0.004	
Barium (ppb)						
Garzoli Well	2013	0	0	1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Well 6	2010	1.0	1.0	1	2	
Chromium (ppb)						
Garzoli Well	2013	15	15	50	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Well 6	2010	2	2	50	(100)	
*TTHMs (ppb)						
Browning Fire Hydrant	2013	3.0	3.0	80	N/A	By-product of drinking water disinfection
769 Browning	2013	8.4	8.4	80	N/A	
1045 Davis	2013	3.7	3.7	80	N/A	
372 Mt. Arbor	2013	3.1	3.1	80	N/A	
*HAA5s						
Browning Fire Hydrant	2013	0	0	60	N/A	By-product of drinking water disinfection
769 Browning	2013	0	0	60	N/A	
1045 Davis	2013	0	0	60	N/A	
372 Mt. Arbor	2013	2	2	60	N/A	
Chlorine (ppm)	2013	2	0.2-2	4.0	4	Drinking water disinfectant added for treatment
*Nitrate (ppm)						
Garzoli Well	2013	0	0	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Well 6	2012	2.3	2.3	45	45	
Mercury (ppb)						
Garzoli Well	2013	0	0	2	1.2	Discharge from refineries and factories, runoff from landfills and cropland; erosion of natural deposits
Well 6	2010	0	0	2	1.2	

Dibromochloropropane (ppt) (DBCP)						Banned nemtocide that still may be present in soils due to runoff/leaching from former use on soybean, cotton, vineyards, tomatoes, and fruit tree
Garzoli Well	2013	0	0	200	1.7	
Well 6	2010	0	0	200	1.7	
Browning Road Well	2013	0	0	200	1.7	

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
Color (units)						
Garzoli Well	2013	5	5	15	N/A	Naturally-occurring organic materials
Well 6	2010	0	0	15	N/A	
Turbidity (units)						
Garzoli Well	2013	0	0	5	N/A	Soil Runoff
Well 6	2010	.40	.40	5	N/A	

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notification Level	Health Effects Language
Vanadium (ppb)					
Garzoli Well	2013	82	82	N/A	Babies of some pregnant women who drink water containing vanadium in excess of the notification level may have increased risk of development effects, based on studies in laboratory animals
Well 6	2010	11	11	N/A	

*Any violation of an MCL, MRDL, or TT is asterisked. Additional information regarding the violation is provided later in this report.

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 McFarland 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
4 th Qtr. of 2013	City failed to comply with trihalomethanes (TTHM) and haloacetic acids (HAA5) monitoring sampling for one of our sites in accordance with Section 64432.1, Title 22, California Code of Regulations (CCR), which establishes the monitoring frequency for TTHM and HAA5	4 th Qtr. of 2013	The City must collect paired TTHM and HAA5 samples quarterly from each of the four assigned sampling sites. The results of quarterly monitoring for TTHMs and HAA5s must be submitted to the Department by the 10 th day of the following month.	We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the 4 th quarter of 2013 we did not monitor all assigned sampling sites for total trihalomethanes (TTHMs) and haloacetic acids (HAA5) in the distribution system and therefore cannot be sure of the quality of the drinking water during that time.
2013	City failed to comply with nitrate sampling for Well 6 and Garzoli Well in accordance with Section 64432.1, Title 22, California Code of Regulations (CCR), which establishes the monitoring frequency for nitrate	2013	The City has to collect a nitrate sample in 2014 (this year) to avoid further enforcement action.	We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the 2013 calendar year we did not monitor or test for nitrate and therefore cannot be sure of the quality of the drinking water during that time.

For Water Systems Providing Ground Water as a Source of Drinking Water

**TABLE 7 – 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
<i>E. coli</i>	0	N/A	0	(0)	Human and animal fecal waste
Enterococci	0	N/A	TT	n/a	Human and animal fecal waste
Coliphage	0		TT	n/a	Human and animal fecal waste