2014 Consumer Confidence Report

Water System Name: **City of McFarland** Report Date: 6/2/2015

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, 2014 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, and Browning Road Well

Drinking Water Source Assessment information: Total production for 2014 from the ground wells was 519.53 million gallons with the storage tank. The majority, 519.53 million gallons, were pumped from deep water bearing layers of exceptional quality.

A source water assessment was conducted for the City of McFarland water supply wells on June 2009 for Taylor Well, August 2002 for Garzoli Well and Well 6, and August 2012 for Browning Road Well. The sources are considered most vulnerable to the following activities not associated with any detected contaminants:

- Agricultural Drainage
- Septic Systems – low density (<1/acre)
- Sewer Collection Systems
- Automobile-Gas Stations
- County Road Operation

Time and place of regularly scheduled board meetings for public participation: The first and last Thursday of each month at 6:00 pm at the Veteran's Memorial Hall – City Council Chambers, 103 W. Sherwood Ave, 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

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.

ND: not detectable at testing limit

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

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.

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 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 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, 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 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	1	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or *E. coli*	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

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)	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)						Salt present in the water and is generally naturally occurring
Well 6	2014	78	78	None	None	
Garzoli Well	2014	48	48	None	None	
Taylor Well	2014	35	35	None	None	
Browning Rd Well	2014	53	53	None	None	
Hardness (ppm)						Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring
Well 6	2014	15	15	None	None	
Garzoli Well	2014	12.5	12.5	None	None	
Taylor Well	2014	7.49	7.49	None	None	
Browning Rd Well	2014	17	17	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)						Presence of radioactive substances on surface or within solids, liquids, or gases; erosion of natural deposits
Well 6	2014	0.00	1	5	(0)	
Garzoli Well	2014	0.125	1	5	(0)	
Taylor Well	2014	0.048	1	5	(0)	
Browning Rd Well	2014	0.856	1	5	(0)	
Aluminum (ppm)						Residue from some surface water treatment process; erosion of natural deposits
Well 6	2014	20	20	1	0.6	
Garzoli Well	2014	40	40	1	0.6	
Taylor Well	2014	40	40	1	0.6	
Browning Rd Well	2014	0	0	1	0.6	
Arsenic (ppb) (1)						Runoff from orchards; glass and electronics production wastes; erosion of natural deposits
Well 6	2014	10	9-10	10	0.004	
Garzoli Well	2014	13	5-13	10	0.004	
Taylor Well	2014	10	6-10	10	0.004	
Browning Rd Well	2014	4	2-4	10	0.004	
Barium (ppb)						Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Well 6	2014	0.5	0.5	1000	2	
Garzoli Well	2014	0.4	0.4	1000	2	
Taylor Well	2014	0.7	0.7	1000	2	
Browning Rd Well	2014	21.8	21.8	1000	2	
Chromium (ppb)						Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Well 6	2014	0	0	50	(100)	
Garzoli Well	2014	9	9	50	(100)	
Taylor Well	2014	7	7	50	(100)	
Browning Rd Well	2014	5.5	5.5	50	(100)	
*TTHMs (ppb)						By-product of drinking water disinfection
769 Browning	2014	1.9	1.9	80	N/A	
Taylor Well	2014	1.1	1.1	80	N/A	
1049 Davis	2014	4.5	4.5	80	N/A	
Fire Hydrant (Browning)	2014	2.3	2.3	80	N/A	

*HAA5s (ppb)						By-product of drinking water disinfection
769 Browning	2014	0	0	60	N/A	
Taylor Well	2014	0	0	60	N/A	
1049 Davis	2014	2	2	60	N/A	
Fire Hydrant (Browning)	2014	0	0	60	N/A	
Chlorine (ppm)	2014	1.2	0-1.2	4.0	4	Drinking water disinfectant added for treatment
*Nitrate (ppm)						Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Well 6	2014	0.6	0.6	45	45	
Garzoli Well	2014	14.5	14.5	45	45	
Taylor Well	2014	7.5	7.5	45	45	
Browning Rd Well	2014	11	11	45	45	
Mercury (ppb)						Discharge from refineries and factories, runoff from landfills and cropland; erosion of natural deposits
Well 6	2014	0	0	2	1.2	
Garzoli Well	2014	0	0	2	1.2	
Taylor Well	2014	0	0	2	1.2	
Browning Rd Well	2014	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
Well 6	2014	0	0	200	1.7	
Garzoli Well	2014	0	0	200	1.7	
Taylor Well	2014	0	0	200	1.7	
Browning Rd Well	2014	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)						Naturally-occurring organic materials
Well 6	2014	0	0	15	N/A	
Garzoli Well	2014	0	0	15	N/A	
Taylor Well	2014	0	0	15	N/A	
Browning Rd Well	2014	0	0	15	N/A	
Turbidity (units)						Soil Runoff
Well 6	2014	1.1	1.1	5	N/A	
Garzoli Well	2014	4.9	4.9	5	N/A	
Taylor Well	2014	0.3	0.3	5	N/A	
Browning Rd Well	2014	0	0	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)					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	
Garzoli Well	2013	82	82	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

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 2014 we did not monitor or test for hexavalent chromium, and therefore cannot be sure of the quality of the drinking water at that time. Recent samples were collected on March 25, 2015, and the results were below the MCL of 10 ug/L. Hexavalent is known to cause cancer in humans when inhaled. It can also damage the lining of the nose and throat and irritate the lungs. When swallowed, hexavalent chromium can upset the gastrointestinal tract and damage the liver and kidneys.

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