2015 Consumer Confidence Report

Water System Name: **Meadowbrook Water Co of Merced, Inc.** Report Date: February 26, 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, 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.

Daimntawv tshaj tawm no muaj lus tseemceeb txog koj cov dej haus. Tshab txhais nws, los yog tham nrog tej tug neeg uas totaub txog nws.

Type of water source(s) in use: Groundwater

Name & general location of source(s): Well 4: S Santa Fe; Well 5: Poplar; Well 6: Meadowbrook

The sources are considered most vulnerable to the following activities not associated with any detected contaminants:

Automobile – Gas stations, historic gas stations, injection wells/dry wells/sumps, known contaminant plumes, septic systems – high density (>1 acre), underground injection of commercial/industrial discharges

Discussion of Vulnerability

Well 4 is the deepest well. It is properly constructed and situated away from sanitary hazards. There are industrial and sewage hazards in the protection zones, but the monitoring to date indicates it has not adversely impacted the quality of water produced. However, the well is not operated continuously due to its high production capacity and lack of a storage tank.

The BAC Pritchard hazardous waste clean-up site is located in Zone A (2 year time of travel), but it has not been found to impact Well 4 or any other ground water extraction/treatment facilities and a network of off-site monitoring wells.

A field survey of surrounding land uses found a variety of petroleum-related activities, but a review of the organic chemical monitoring indicates the water system has not had any detectable concentrations from any of its well sources.

Time and place of regularly scheduled board meetings for public participation: As announced

For more information contact: Connie Farris, 209-722-1061

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 below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the

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)

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

ppt: parts per trillion or nanograms per liter

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.

(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	None (In a mo.)	0	More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or *E. coli*	None (In the year)	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	Sample Date	No. of samples collected	90th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	6/25/2013	20	<0.005	0.255	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	6/25/2013	19	.280	None	1.3	.05	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)	5/15/2014	34	30-34	None	None	Salt present in the water and is generally naturally occurring
Hardness (ppm)	Various	256 (Avg.)	169-344	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 later in this report.*

***Any violation of an MCL, MRDL, or TT 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
Arsenic ppb	5/15/2014	<2.0	<2.0 - 3.4	10	.004	Erosion of natural deposits; runoff from orchards; glass & electronics production wastes.
Barium ppm	5/15/2014	.16	.110 - .260	1000	2	Discharges of oil drilling wastes & from metal refineries; erosion of natural deposits.
Calcium ppm	5/15/2014	50.56	35.4 – 77.8	n/a	n/a	
Chlorine Residuals ppm	Monthly	.20	.12-.24	4	4	Drinking water disinfectant added for treatment
Gross Alpha Particle pCi/L	2015	8.3	3.8 – 12.8	15	(0)	Erosion of natural deposits
Magnesium ppm	5/15/2014	17.1	4.3 - 29.0	n/a	n/a	

Nitrate ppm	8/20/2015	22.73	16-22.4	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Perchlorate ppb	2/19/2015	<4.0	n/a	4.0	4.0	
Potassium mg/L	5/15/2014	6.3	5.9-6.8	n/a	n/a	
Total Alkalinity ppm	5/15/2014	253.73	157.5 – 329.7	n/a	n/a	
Turbidity	5/15/2014	10.5	.05-.09	5	n/a	Soil runoff
Uranium	5/21/2015	14.0	n/a	n/a	n/a	Naturally occurring
Hexavalent Chromium ppb [1]	9/28/2015	2.70 (Avg.)	none	n/a	n/a	

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*
Aluminum ppm	5/15/2014	<.05	<.05	1	.6	Erosion of natural deposits; residue from some surface water treatment processes
Bicarbonate ppm	5/15/2014	309.56	192.2 – 402.2	n/a	n/a	
Chloride ppm	5/15/2014	14.73	5.0-26.6	500	n/a	Runoff/ leaching from natural deposits; seawater influence
Copper ppm	5/15/2014	<.05	<.05	1	.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Foaming Agents (MBAS) ppb	5/15/2014	<.02	<.02	.5	n/a	Municipal and industrial waste discharges
Iron ppb	5/15/2014	<100	<100	300	100	Leaching from natural deposits; industrial wastes
Specific Conductance µS/cm	5/15/2014	495	300 - 680	1600	n/a	Substances that form ions when in water; seawater influence
Sulfate ppm	5/15/2014	12.6	8.2-19.2	500	n/a	Runoff/ leaching from natural deposits; industrial wastes
Total Filterable Residue (TDS) mg/L	5/15/2014	351.66	213 - 448	1000	n/a	Runoff/ leaching from natural deposits
Zinc ppm	2008	<.05,	<.05	5	n/a	Runoff/leaching from natural deposits; industrial wastes

TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS

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

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. Meadowbrook Water Company 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**
None				

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**
E. coli	None (In the year)	N/A	0	(0)	Human and animal fecal waste

Enterococci	None (In the year)	N/A	TT	n/a	Human and animal fecal waste
Coliphage	None (In the year)	N/A	TT	n/a	Human and animal fecal waste

Summary Information for Fecal Indicator-Positive Ground Water Source Samples, Uncorrected Significant Deficiencies, or Ground Water TT

SPECIAL NOTICE OF FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLE
None

SPECIAL NOTICE FOR UNCORRECTED SIGNIFICANT DEFICIENCIES
None

VIOLATION OF GROUND WATER TT				
TT Violation	**Explanation**	**Duration**	**Actions Taken to Correct the Violation**	**Health Effects Language**