

2012 Consumer Confidence Report

Water System Name: Tahoma Meadows Mutual Water Co. Report Date: 4/15/13

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, 2012.

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: Well

Name & location of source(s): Meadow Facility at McKinney Rubicon Springs/Evergreen

Drinking Water Source Assessment information: Not required

Time and place of regularly scheduled board meetings for public participation: June 1, 2013, 12:30 pm
950 Woodside Ct.
Homewood, CA 96141

For more information, contact: Ronald Hill Phone: (650) 766-1264

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 level of a disinfectant added for water treatment that may not be exceeded at the consumer's tap.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a disinfectant added for water treatment below which there is no known or expected risk to health. MRDLGs are set by the U.S. 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.

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 (ug/L)

ppt: parts per trillion or nanograms per liter (ng/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 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.

In order to ensure that tap water is safe to drink, the USEPA and the state 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, 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 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 (to be completed only if there was a detection of bacteria)	Highest No. of detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria	
Total Coliform Bacteria*	(In a mo.) <u>4*</u>	3	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) <u>0</u>	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 (to be completed only if there was a detection of lead or copper in the last sample set)	No. of samples collected	90th percentile level detected	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant
Lead (ppb)	5	ND	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	5	0.062 ppm	0	1.3	0.17	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)	7/07/10	8.5		none	none	Salt present in the water and is generally

Hardness (ppm)	7/07/10	62		none	none	naturally occurring Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring
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*Any violation of an MCL or AL is marked with an asterisk. 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	1/04/12 – 10/04/12	21.8 ± 7.0* ug/L	13.9 – 28.7	10 ug/L	4 ug/L	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Gross Alpha Particle	1/07/08 – 4/1/08	ND		15 pCi/L	0	Erosion of natural deposits
Uranium	1/07/08 – 4/1/08	0.69 pCi/L	0.52 - 0.85	20 pCi/L	0.43	Erosion of natural deposits
Radium-226	1/07/08 – 4/1/08	0.049 pCi/L	0 – 0.097	5 pCi/L	0	Erosion of natural deposits
Radium-228	1/07/08 – 4/1/08	0.005 pCi/L	0 – 0.01	5 pCi/L	0	Erosion of natural deposits
Nitrate (as nitrate, NO ₃)	8/08/12	0.23 ppm		45ppm	45ppm	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Perchlorate	07/06/10	ND		6 ppb	6 ppb	Perchlorate is an inorganic chemical used in solid rocket propellant, fireworks, explosives, flares, matches, and a variety of industries. It usually gets into drinking water as a result of environmental contamination from historic aerospace or other industrial operations that used or use, store, or dispose of perchlorate and its salts.
Turbidity	7/06/10	3 NTU		TT		Soil runoff
Nitrite (as nitrogen, N)	6/1/10	ND		1 ppm	1 ppm	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Inorganic Chemicals:						
Aluminum	9/04/12	ND		1 mg/L	0.6 mg/L	Erosion of natural deposits; residue from some surface water treatment processes
Antimony	9/04/12	ND		6 ug/L	20 mg/L	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Barium	9/04/12	0.036		1 mg/L	2 mg/L	Discharges of oil drilling wastes and from metal refineries; erosion of natural deposits
Beryllium	9/04/12	ND		4 ug/L	1 mg/L	Discharge from metal refineries, coal-burning factories, and electrical, aerospace, and defense industries
Cadmium	9/04/12	ND		5 ug/L	0.04 ug/L	Internal corrosion of galvanized pipes; erosion of natural deposits; discharge from electroplating and industrial chemical factories, and metal refineries; runoff from waste batteries and paints
Chromium	9/04/12	ND		50 ug/L	100 ug/L	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits

Fluoride	9/04/12	ND		2 mg/L	1 mg/L	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Mercury	9/04/12	ND		2 ug/L	1.2 ug/L	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills and cropland
Nickel	9/04/12	ND		100 ug/L	12 ug/L	Erosion of natural deposits; discharge from metal factories
Selenium	9/04/12	ND		50 ug/L	50 ug/L	Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)
Thallium	9/04/12	ND		2 ug/L	0.1 ug/L	Leaching from ore-processing sites; discharge from electronics, glass, and drug factories
Volatile Organic Chemicals:						
1,1,1-Trichloroethane (ppb)	6/19/07	ND		200 ug/L	1000 ug/L	Discharge from metal degreasing sites and other factories; manufacture of food wrappings
1,1,2,2-Tetrachloroethane (ppb)	6/19/07	ND		1 ug/L	0.1 ug/L	Discharge from industrial and agricultural chemical factories; solvent used in production of TCE, pesticides, varnish and lacquers
1,1,2-Trichloroethane (ppb)	6/19/07	ND		5 ug/L	0.3 ug/L	Some people who use water containing 1,1,2-trichloroethane in excess of the MCL over many years may experience liver, kidney or immune system problems.
1,1,2-Trichloro-1,2,2-trifluoroethane (ppm)	6/19/07	ND		1.2 mg/L	4 mg/L	Discharge from metal degreasing sites and other factories; drycleaning solvent; refrigerant
1,1-Dichloroethane (ppb)	6/19/07	ND		5 ug/L	3 ug/L	Extraction and degreasing solvent; used in manufacture of pharmaceuticals, stone, clay and glass products; fumigant
1,1-Dichloroethylene (ppb)	6/19/07	ND		6 ug/L	10 ug/L	Discharge from industrial chemical factories
1,2,4-Trichlorobenzene (ppb)	6/19/07	ND		5 ug/L	5 ug/L	Discharge from textile-finishing factories
1,2-Dichlorobenzene (ppb)	6/19/07	ND		600 ug/L	600 ug/L	Discharge from industrial chemical factories
1,2-Dichloroethane (ppt)	6/19/07	ND		500 ng/L	400 ng/L	Discharge from industrial chemical factories
1,2-Dichloropropane (ppb)	6/19/07	ND		5 ug/L	0.5 ug/L	Discharge from industrial chemical factories; primary component of some fumigants
1,4-Dichlorobenzene (ppb)	6/19/07	ND		6 ug/L	100 ug/L	Discharge from industrial chemical factories; major biodegradation byproduct of TCE and PCE groundwater contamination
Benzene (ppb)	6/19/07	ND		1 ug/L	0.15 ug/L	Discharge from plastics, dyes and nylon factories; leaching from gas storage tanks and landfills

Carbon tetrachloride (ppt)	6/19/07	ND		500 ng/L	100 ng/L	Discharge from chemical plants and other industrial activities
Monochlorobenzene (ppb)	6/19/07	ND		70 ug/L	200 ug/L	Discharge from industrial and agricultural chemical factories and drycleaning facilities
Chloroethane	6/19/07	ND				
cis-1,2-Dichloroethylene (ppb)	6/19/07	ND		6 ug/L	100 ug/L	Discharge from industrial chemical factories; major biodegradation byproduct of TCE and PCE groundwater contamination
1,3-Dichloropropene (ppt)	6/19/07	ND		500 ng/L	200 ng/L	Runoff/leaching from nematocide used on croplands
Ethylbenzene (ppb)	6/19/07	ND		300 ug/L	300 ug/L	Discharge from petroleum refineries; industrial chemical factories
Xylenes (ppm)	6/19/07	ND		1.750 mg/L	1.8 mg/L	Discharge from petroleum and chemical factories; fuel solvent
Methylene chloride	6/19/07	ND				
Methyl- <i>tert</i> -butyl ether (ppb)	6/19/07	ND		13 ug/L	13 ug/L	Leaking underground storage tanks; discharge from petroleum and chemical factories
Styrene (ppb)	6/19/07	ND		100 ug/L	100 ug/L	Discharge from rubber and plastic factories; leaching from landfills
Tetrachloroethylene (PCE) (ppb)	6/19/07	ND		5 ug/L	0.06 ug/L	Discharge from factories, dry cleaners, and auto shops (metal degreaser)
Toluene (ppb)	6/19/07	ND		150 ug/L	150 ug/L	Discharge from petroleum and chemical factories; underground gas tank leaks
trans-1,2-Dichloroethylene (ppb)	6/19/07	ND		10 ug/L	60 ug/L	Discharge from industrial chemical factories; minor biodegradation byproduct of TCE and PCE groundwater contamination
1,3-Dichloropropene (ppt)	6/19/07	ND		500 ng/L	200 ng/L	Runoff/leaching from nematocide used on croplands
Trichloroethylene [TCE] (ppb)	6/19/07	ND		5 ug/L	1.7 ug/L	Discharge from metal degreasing sites and other factories
Trichlorofluoromethane (ppb)	6/19/07	ND		150 ug/L	700 ug/L	Discharge from industrial factories; degreasing solvent; propellant and refrigerant
Vinyl Chloride (ppt)	6/19/07	ND		500 ng/L	50 ng/L	Leaching from PVC piping; discharge from plastics factories; biodegradation byproduct of TCE and PCE groundwater contamination

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
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Conductance	7/07/10	158 uS/cm		1600 uS/cm		Substances that form ions when in water; seawater influence
Copper	7/07/10	0.062 ppm		1.0 ppm		Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Iron	7/07/10	403 ppb		300 ppb		Leaching from natural deposits; industrial wastes
Manganese	7/07/10	172 ppb		50 ppb		Leaching from natural deposits
Chloride	6/05/07	0.5 ppm		500 ppm		Runoff/leaching from natural deposits; seawater influence
Sulfate	7/07/10	0.6 ppm		500 ppm		Runoff/leaching from natural deposits; industrial wastes
Total dissolved Solids	7/06/10	84 ppm		1000 ppm		Runoff/leaching from natural deposits
Turbidity	7/06/10	3.0 NTU		5 NTU		Soil runoff
Zinc	7/06/10	ND		5 ppm		Runoff/leaching from natural deposits; industrial wastes
Aluminum	7/07/10	92ppb		200ppb		Erosion of natural deposits, residual from some surface water treatment processes
Foaming Agents (MBAS)	7/07/10	ND		500 ppb		Municipal and industrial waste discharges
Silver	7/07/10	ND		100 ppb		Industrial discharges
Methyl-tert-butyl-ether(MTBE)	7/07/10	ND		5 ppb		Leaking underground storage tanks; discharge from petroleum and chemical factories
Thiobenecarb	7/07/10	ND		1 ppb		Runoff/leaching from rice herbicide
Odor	7/07/10	ND		5 units		Naturally occurring organic materials

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: TMMWC **HAS NOT** detected lead in our water. However, for community water systems, the following advice to homeowners is required:

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. TMMWC 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 Contaminants Exceeding an MCL, MRDL, or AL, or a Violation of Any Treatment Technique or Monitoring and Reporting Requirement

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. During January and December 2011, coliforms were found in more samples than allowed and this was a warning of potential problems. After each positive result, the entire water system was treated with bleach. Additional samples taken immediately after the bleach treatment were found to contain no coliforms. However, the recurrence of contamination prompted us to perform additional sterilization of the reservoir and we have initiated more flushing of the mains. During 2011, we have initiated new sampling techniques to ensure that results reflect the true state of the water in the system.

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.

Notice of Non-compliance – Federal Arsenic Rule:

On December 26, 2007 TMMWC was informed by the County of Placer Department of Health and Human Services that the water company is not in compliance with National Revised Primary Drinking Water Regulations, Section 141.62(b)(16), Title 40, Code of Federal Regulations, which establishes the revised MCL for arsenic. This was expected due to our arsenic levels being higher than the new limits for arsenic that were established by the EPA. We are currently monitoring our arsenic levels every quarter as required and the arsenic levels from our well have not changed significantly, only the maximum permissible level. The water company will continue to monitor the arsenic levels as required. During 2008, the State of California has made the decision to adopt the same MCL for arsenic as the EPA. In response to this action, the water company has begun investigating the possibility of connecting to other local water systems that do not have arsenic as a contaminant.

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
Total coliform	Our water system historically experiences sporadic total coliform	3 occurrences, 1 month each	Chlorination of the water system	Coliforms are bacteria that are naturally present in the environment and are used as an

				indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.
Arsenic MCL	Our well has consistently produced a level of arsenic approximately twice the current MCL.	Ongoing; violation is reported to residents and CDPH quarterly	Connection to a new water system is anticipated to occur this year	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 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		0	(0)	Human and animal fecal waste
Enterococci	0		TT	n/a	Human and animal fecal waste
Coliphage	0		TT	n/a	Human and animal fecal waste