2016 Consumer Confidence Report

Water System Name: **Belmont Terrace Mutual Water Co.** Report Date: June 25, 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, 2016 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: Groundwater Well

Name & general location of source(s): Well #2 is the primary water supply and Backup Well#1 was not used in 2016

Drinking Water Source Assessment information: Summary of 2003 vulnerability study is as follows:

The sources (for Well#1 & Well#2) are considered most vulnerable to the following activities not associated with contaminants detected in the water supply: Dry Cleaners,

Underground storage tanks – confirmed leaking tanks.

Historic gas stations,

Septic systems (high density).

Discussion of Vulnerability Well#1: Tetrachloroethylene (PCE) has been detected in this well. The source of the PCE is currently under investigation, but it probably coming from one of the two nearby dry cleaners. This source is also considered vulnerable to other activities located near the source. (Last detection was a trace amount in 2006.)

Discussion of Vulnerability Well#2 (Main source of water): No known contaminants have been detected in this source, however tetrachloroethylene (PCE) has been detected in the water system's standby well (see above). This source is also considered vulnerable to other activities located near the source.

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

Contact Board@BelmontTerrace.org for schedule, time, and location.

For more information, contact: Bruce Petersilge or Debby Turner Phone: (707) 820-7787 (Bruce) or

Water Operators <u>(707) 820-7633 (Debby)</u>

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

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.

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

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.

problems and determine (if possible) why an *E. coli* MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

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)

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, and 6 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						
Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria	
Total Coliform Bacteria (state Total Coliform Rule)	0	0	1 positive monthly sample	0	Naturally present in the environment	
Fecal Coliform or E. coli (state Total Coliform Rule)	0	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or <i>E. coli</i> positive	0	Human and animal fecal waste	
E. coli (federal Revised Total Coliform Rule)	(from 4/1/16- 12/31/16)		(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									
Lead and Copper (complete if lead or copper detected in the last sample set)	Sample Date	No. of sampl es collect ed	90 th percen leve detect	ntile el	No. sites exceeding AL	AL	PHG	Typical Source of Contaminant	
Lead (ppb)	8/1/2014	5	<5	į	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits	
Copper (ppm)	8/1/2014	5	0.029	95	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
	TABLE 3 –	SAMPL	ING R	ESU	LTS FOR S	SODIUM A	AND HARDI	NESS	
Chemical or Constituent (and reporting units)	Sample Date	Leve Detect			Range of etections	MCL	PHG (MCLG)	Typical Source of Contaminant	
Sodium (ppm) Well2 Backup-Well1	3/20/2015 5/1/2006	14 23				none	none	Salt present in the water and is generally naturally occurring	
Hardness (ppm) Well2 Backup-Well1	3/20/2015 5/1/2006	74 36				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 <u>PRIMARY</u> 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) Well#2	3/20/2015	2.0	2.0			10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes	
Some people who drink was system problems, and may	_					er many yea	ars may exper	ience skin damage or circulatory	
Barium (ppb) Backup Well#1	7/8/2016	180)			1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits	
Chromium (ppb) Backup-Well#1	7/8/2016	7.0				50	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits	
Chromium, Hexavalent Backup-Well#1	12/31/2014	8.9				10	0.02	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; erosion of natural deposits	
Fluoride (ppm) Well#2	3/19/2012	.16	.16			2.0	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	
Nitrate (as nitrate, N) (ppm) Backup-Well#1	3/25/2014	25				45	45	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits	
Gross Alpha Particle Activity (pCi/L) Backup-Well#1	5/1/2006	.23	3			50 ^(a)	(0)	Decay of natural and man-made deposits	

TABLE 5 – DETECTION OF CONTAMINANTS WITH A <u>SECONDARY</u> DRINKING WATER STANDARD						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant
Chloride (ppm) Well #2	3/20/2015	9.6				Runoff/leaching from natural
Backup-Well# 1	5/1/2006	18		500		deposits; seawater influence
Color (Units) Backup-Well #1	5/1/2006	3.0		15		Naturally-occurring organic materials
*Iron (ppb)						Leaching from natural
Well #2 Backup-Well #1*	3/20/2015 5/1/2006	100 430.0 *		300		deposits; industrial wastes
Manganese (ppb) Well #2	3/20/2015	66		500	50	Leaching from natural deposits
Specific Conductance						Substances that form ions
(μS/cm) Well #2	3/20/2015	280		1600		when in water; seawater
Backup-Well #1	5/1/2006	6.4		1000		influence
Sulfate (ppm) Well #2	3/20/2015	12.00		7 00		Runoff/leaching from natural
Backup-Well #1	5/1/2006	.6.4		500		deposits; industrial wastes
Total Dissolved Solids						Runoff/leaching from natural
(TDS) (ppm) Well #2	3/20/2015	170		1000		deposits
Backup-Well #1	5/1/2006	150		1000		
Turbidity (Units)						
Well #2	4/17/2016	1.20		5		Soil runoff
Backup-Well1	5/1/2006	3.30				
TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	Notificat	ion Level	Health Effects Language
None to 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. Belmont Terrace Mutual 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. [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 (1-800-426-4701) or at http://www.epa.gov/lead.

Note: Backup Well #1 was not used in 2016

Nitrate level in Well #2 is above 25 mg/L, but below 45 mg/L - *Infants below the age of six months who drink water* containing nitrate in excess of the MCL may quickly become seriously ill and, if untreated, may die because high nitrate levels can interfere with the capacity of the infant's blood to carry oxygen. Symptoms include shortness of breath and blueness of the skin. High nitrate levels may also affect the oxygen-carrying ability of the blood of pregnant women

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				
Exceeding secondary MCL standard for Iron (Backup well#1)		The backup well#1 was not used in 2016	We only use this well when Well#2/storage tank is not available to pressurize water system	This exceedance is not considered to be a health risk				

Iron was found at levels that exceed the secondary MCL of 300 ug/L. The iron MCL was set to protect you against unpleasant aesthetic effects (e.g., color, taste, and odor) and the staining of plumbing fixtures (e.g., tubs and sinks) and clothing while washing. The high iron levels are due to leaching of natural deposits.

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	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			