Iron & Manganese blending freatment

2015 Consumer Confidence Report

Water System Name: Oakhurst/Sierra Lakes

Report Date: May 19, 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, 2015 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alquien que lo entienda bien.

Type of water source(s) in use: Hard rock wells which draw from underground fractures.

Name & general location of source(s): Sierra Lakes – Wells #1A, #3, #4, #5, #6, #7, #8, and #9. Oakhurst – Junction Wells #1, and #2. Forest Ridge - Ditton Wells #1, #2, #3, and #4. Quail Meadows - Wells #2, #3, and #4.

Drinking Water Source Assessment Information: Done using the default Groundwater System Method on February 3, 2003.

The following sources of information were used in the assessment: Water system and SWRCB files. The water systems completed the PCAs for this source. Procedures used to conduct the assessment include: PCA inventories, well data sheets, and GPS survey completed and conduced by Waterboards District staff. The source is considered most vulnerable to the following activities not associated with any detected contaminants: illegal activities/unauthorized dumping, sewer collection system, automobile – gas stations, septic systems – high density, septic systems - low density. A copy of the complete assessment may be viewed at Hillview Water Company, Inc. 40312 Greenwood Way, Oakhurst, CA 93644. You may request a summary of the assessment be sent to you by contacting Ralph Fairfield (559) 683.4322, P.O. Box 2269 Oakhurst, CA 93644. Time and place of regularly scheduled board meetings for public participation: Hillview Water Company, Inc., does not hold regularly scheduled meetings. The public is allowed to participate in all CPUC proceedings. Phone: 559.683.4322 For more information, contact: Hillview Water Company, Inc.

TERMS USED IN THIS REPORT

MCLGs) as is economically and technologically requirements. feasible. Secondary MCLs are set to protect the odor. taste, and appearance of drinking water.

level of a contaminant in drinking water below which health at the MCL levels. 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 ND: not detectable at testing limit disinfectant is necessary for control of microbial contaminants.

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

Maximum Contaminant Level (MCL): The highest Primary Drinking Water Standards (PDWS): MCLs and level of a contaminant that is allowed in drinking MRDLs for contaminants that affect health along with their water. Primary MCLs are set as close to the PHGs (or monitoring and reporting requirements, and water treatment

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the Maximum Contaminant Level Goal (MCLG): The drinking water. Contaminants with SDWSs do not affect the

> 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.

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

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

ppq: parts per quadrillion or picogram per liter (pg/L)

pCi/L: picocuries per liter (a measure of radiation)

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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.

Microbiological Contaminants (complete if bacteria detected)	Highest No. of Detections	No. of months in violation	MCL	MCLG	Typical Source of Bacteria	
Total Coliform Bacteria	(In a mo.) 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>	(in the year) 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	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)	9/11,12, 25/2013	10	ND	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits.		
Copper (ppm)	9/11,12, 25/2013	10	0.21	0	1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.		

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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)	9/15/15	160		None	None	Salt present in the water and is generally naturally occurring.
Hardness (ppm)	9/15/15	720		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.

Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant
Arsenic – ppb	3/9,6/8,9/ 15,12/15/ 2015	2.4	ND – 13	10	0.004	Erosion of natural deposits; runoff from orchards; glass and electronics production wastes.
Chlorine – ppm	January – December	0.80	0.70 - 0.95	[4]	[4]	Drinking water disinfectant added for treatment.
Chromium – ppb	3/2009	4.1	0 – 4.1	50	(100)	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits.
Fluoride – ppm	9/15/2015	0.21		2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
*Gross Alpha Activity - pCi/L	3/9/2015	47	32.7 – 236	15	(0)	Erosion of natural deposits.
Nitrate (as nitrate, NO ₃) – ppm	1/12,3/9, 5/19,6/8, 9/15,10/6, 11/10/ 2015	0.6	ND – 16	45	45	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Tetrachloroethylene (PCE) – ppb	1/15,2/9, 4/20,5/19, 6/8,7/14, 10/6/2015	0.11	0.88 – 7.7	5	0.06	Discharge from factories, dry cleaners, and auto shops (metal degreaser).
TTHMs (Total Trihalomethanes) – ppb	6/17/2015	2.7		80	NA	By-product of drinking water disinfection.
Uranium – pCi/L	1/19,4/20, 7/14,10/6/ 2015	9	23 – 370	20	0.43	Erosion of natural deposits.
1,2-Dichlorobenzene – ppb	9/2012	5.4	ND - 5.4	20	0.43	Erosion of natural deposits.

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	
Chloride – ppm	9/15/15	36		500	NA	Runoff/leaching from natural deposits; seawater influence.	
Color	9/15/15	5		15	NA	Naturally-occurring organic materials.	
*Iron – ppb, raw before blending or treatment	9/15/15	960		300	NA	Leaching from natural deposits; industrial wastes.	
Iron – ppb, after blending and treatment	9/15/15	64		300	NA	Leaching from natural deposits; industrial wastes.	
*Manganese – ppb, after blending and before treatment	9/15/15	500		50	NA	Leaching from natural deposits.	
Manganese – ppb, after blending and treatment	9/15/15	33		50	NA	Leaching from natural deposits.	
Specific Conductance µS/cm	3/9,5/19, 6/8,9/15, 11/3/ 2015	546	260 – 3200	1600	NA	Substances that form ions when in water; seawater influence.	
Sulfate – ppm	9/15/15	30		500	NA	Runoff/leaching from natural deposits; industrial wastes.	
Total Dissolved Solids (TDS) – ppm	9/15/15	103		1000	NA	Runoff/leaching from natural deposits.	
Turbidity – Units	9/15/15	3.2		5	NA	Soil runoff.	
Zinc – ppm	9/15/15	0.01		5	NA	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		
tert-Butyl alcohol (TBA) - ppb	5/19/2015	2.7		12	Some people who use water containing tert-butyl alcohol in excess of the notification level ove many years may have an increase risk of getting cancer, based on studies in laboratory animals.		

^{*}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

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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. Hillview Water Company, Inc., 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 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 or at http://www.epa.gov/lead.

Summary Information for Violation of a MCL, MRDL, AL, TT, or Monitoring and Reporting Requirement

Violation	Explanation	Duration	Actions Taken to Correct the Violation	Health Effects Language
*Gross Alpha Activity – pCi/L	Erosion of natural deposits.	Since Radiological Testing has been done in this water system.	Hillview has received a Proposition 84 grant from Waterboards which will provide water treatment and eliminate the MCL violations. The progress is in progress. Completion expected in 2017.	Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
*Iron – ppb, raw before blending or treatment	Leaching from natural deposits.	Until the Iron and Manganese removal plant is completed.	Hillview has received a Proposition 84 grant from Waterboards which will provide water treatment and eliminate the MCL violations. The project is in progress. Completion expected in 2017.	The iron MCL is a secondary drinking water standard and no Health Effects Language is provided.
*Manganese – ppb, after blending and before treatment	Leaching from natural deposits.	Until the Iron and Manganese removal plant is completed.	Hillview has received a Proposition 84 grant from Waterboards which will provide water treatment and eliminate the MCL violations. The project is in progress. Completion expected in 2017.	The manganese MCL is a secondary drinking water standard and no Health Effects Language is provided for the MCL of 50 ppb, only for the notification level of 500 ppb.

Summary Information for Operating Under a Variance or Exemption

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