2016 Consumer Confidence Report

Water System Name: **Santa Ynez Rancho Estates MWC**   Report Date: **April 5, 2017**

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 – two well sites within Santa Ynez Rancho Estates**

Name & general location of source(s): **Well #1 is located off of Santa Agueda Road. Well #2 is located off of Linda Vista Drive. An associated storage system consisting of a 250,000 gallon above-ground storage tank and a second 100,000 gallon above-ground storage tank is located north of the Santa Ynez Rancho Estates development off of Sky Drive.**

Drinking Water Source Assessment information: **A source assessment was completed in December 2002. Source vulnerabilities are from livestock and septic systems which could result in elevated nitrate levels. A complete copy of this report is available from the Santa Barbara County Environmental Health Services office located at 2125 Centerpointe Parkway #333, Santa Maria, CA 93455.**

Time and place of regularly scheduled board meetings for public participation: **Annual meetings are typically held within the first half of the year. Shareholders to be noticed as to time and place prior to meeting. SYREMWC Private mutual water company; meetings are not public.**

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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 use of disinfectants to control microbial contaminants.

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 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)

Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.	**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)**	6	2	**1 positive monthly sample**	0	Naturally present in the environment
Fecal Coliform or *E. coli* (state Total Coliform Rule)	(In the year)	0	A routine sample and a repeat sample are total coliform positive, and one of these is also fecal coliform or *E. coli* positive		Human and animal fecal waste
E. coli (federal Revised Total Coliform Rule)	(from 4/1/16-12/31/16)	0	(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 samples collected**	**90th percentile level detected**	**No. sites exceeding AL**	**AL**	**PHG**	**Typical Source of Contaminant**
Lead (ppb)	2014	5	ND	0	15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)	2014	5	0.2	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)	2014	29	28 – 29	none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)	2014	435	430 - 440	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 __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**
Nitrate as Nitrogen, N (ppm)	2/10/16	1.26	0.92 – 1.6	10	10	Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Hexavalent Chromium (ppb)	6/01/16 9/06/16 12/13/16	33.17	28 – 38	10	0.02	Discharge from electroplating factories, leather tanneries, wood preservation, chemical synthesis, refractory production, and textile manufacturing facilities; **erosion of natural deposits**
Chromium (ppb)	2016 (various)	25.58	22 – 29	50	100	Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Barium (ppm)	2014	0.25	0.23 – 0.27	1	2	Discharge of oil drilling wastes and from metal refineries; erosion of natural deposits
Fluoride	2014	0.13	0.11 – 0.14	2	1	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Radium 228 (pCi/L)	2009	0.5 +/- 0.2	ND – 1.35	5	0.019	Erosion of natural deposits

DISTRIBUTION SYSTEM DISINFECTION

Chlorine (ppm)	12/13/16 12/20/16 12/27/16	0.17	0.1 – 0.24	[4.0 (as Cl_2)]	[4 (as Cl_2)]	Drinking water disinfectant added for treatment

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)	2014	34.5	33 – 36	500	N/A	Runoff/leaching from natural deposits; seawater influence
Specific Conductivity (µS/cm)	2014	825	820 – 830	1600	N/A	Substances that form ions when in water; seawater influence
Sulfate (ppm)	2014	27.5	27 – 28	500	N/A	Runoff/leaching from natural deposits; industrial wastes
Total Dissolved Solids – TDS (ppm)	2014	455	450 – 460	1000	N/A	Runoff/leaching from natural deposits
Turbidity (units)	2014	0.38	0.13 – 0.63	5	N/A	Soil runoff
Copper (ppm)	2014	0.017	0.013 – 0.020	1	N/A	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

*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. Santa Ynez Rancho Estates 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: Santa Ynez Rancho Estates is operating under an approved Hexavalent Chromium Compliance Plan under California Senate Bill 385 and is not deemed in violation of the hexavalent chromium MCL under the terms of the law.

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	**SYRE had total coliform exceedances at various locations in April and November, 2016. The exceedances were likely caused by contamination from the hose bibs used for sample collection or from exposed tank vents.**	**April 27-29, 2016 and November 14-16, 2016**	**SYRE installed dedicated sample stations to replace the hose bibs, added new silicone around the well seals, replaced vent and valve screens, and installed covers for tank vents. The system began voluntary routine low-level chlorination in December 2016.**	**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.**

Summary Information for Federal Revised Total Coliform Rule
Level 1 and Level 2 Assessment Requirements

Level 1 or Level 2 Assessment Requirement not Due to an *E. coli* MCL Violation

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, waterborne pathogens may be present or that a potential pathway exists through which contamination may enter the drinking water distribution system. We found coliforms indicating the need to look for potential problems in water treatment or distribution. When this occurs, we are required to conduct assessment(s) to identify problems and to correct any problems that were found during these assessments.

During the past year we were required to conduct two Level 1 assessment(s). Two Level 1 assessment(s) were completed. In addition, we were required to take 7 corrective actions and we completed all 7 of these actions. The corrective actions taken are outlined below.

Corrective actions taken by Santa Ynez Rancho Estates MWC as a result of the Level 1 Assessments conducted in 2016 were: 1) installation of new dedicated sample stations; 2) replacement of the silicone seal around each well head; 3) replacement of tank vent screens with finer mesh; 4) chlorination of tanks; 5) installation of tank vent cover to allow for improved air circulation; 6) cutting and capping the unused irrigation line at Well 2; and 7) installation of screens on the tank overflow flapper valves.