

MUTUAL WATER COMPANY of VINEYARD AVENUE ESTATES

**Annual Water Quality Report
July 2015**

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

Water Quality as a Priority

Last year we conducted dozens of tests for over 180 chemicals and contaminants that could be found in your drinking water. We did not detect any contaminants that would make the water unsafe to drink. This report highlights the quality of water we delivered to our customers last year. Included are details about where your water comes from, what it contains, and how it compares to State standards. For more information about your water, please call our Water System Operator Robert Eranio at (805) 732-0495.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants, including mineral and microscopic organic material. The presence of contaminants does not necessarily indicate that 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 (800) 426-4791.

General Information about Source Water

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 before we treat it include:

- ✓ *Microbial contaminants*, such as viruses and bacteria, which 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*, which 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, and septic systems.
- ✓ *Radioactive contaminants* which can be naturally-occurring or be the result of oil and gas production and mining activities.

Our Source Water

During 2015, over 99% of your water supply was provided by United Water's Oxnard-Hueneme Delivery System. United Water Conservation District supplies about 15,000 acre-feet of water per year to several agencies on the Oxnard Plain, including the city of Oxnard, the Port Hueneme Water Agency (PHWA), and several smaller water companies. These agencies supply our water to over 222,000 people, most of it treated or blended with other supplies. Our water source is 100% local groundwater, pumped from wells near El Rio, north of Oxnard. Water from those wells has its origin in the mountains and valleys of the 1,600 square mile Santa Clara River watershed. The wells are in an aquifer called the Oxnard Forebay. Our water is naturally high in minerals that affect its taste, but is safe to drink. Our groundwater is considered to be "under the influence of surface water," which means we do extensive monitoring of turbidity and other parameters to meet health regulations. Water produced by our wells is naturally filtered through the ground. We use chlorine as a disinfectant to kill bacteria, parasites, and viruses.

Then we add chloramines to provide a long-lasting disinfection residual to keep the water safe until it reaches our customers. Due to the longer-lasting residual of chloramines, owners of pet fish must treat their tap water before putting it into aquariums or ponds. This disinfectant has some advantages as compared to chlorine, such as fewer odors, better taste, and a reduction in the formation of carcinogenic trihalomethanes.

Approximately 0.75% of your water was supplied from our wells located at the corner of Rose Ave and Coriscana Street. The ability to use our wells has been significantly restricted due to high nitrates which is caused by the continuing and worsening drought.

About Nitrate

Nitrate in drinking water at levels above 10 mg/L is a health risk for infants of less than six months of age. Such nitrate levels in drinking water can interfere with the capacity of the infant's blood to carry oxygen, resulting in a serious illness; symptoms include shortness of breath and blueness of the skin. Nitrate levels above 10 mg/L may also affect the ability of the blood to carry oxygen in other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant, or you are pregnant, you should ask advice from your health care provider. Nitrate levels may rise quickly because of rainfall or agricultural activity.

Information for Customers with Special Water Needs

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 persons, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. U.S. Environmental Protection Agency (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 (800) 426-4791.

Water Quality Data

The tables below list all the drinking water contaminants that we detected during the 2015 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in these tables is from testing done January 1 through December 31, 2015. The State requires that we monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year. Some of the data, though representative of water quality, is more than one year old.

More Information on Water Quality

For More Information: for additional information or questions regarding this report, please contact Robert Eranio, Water System Superintendent, at (805) 732-0495. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled board meetings. Please call the water company at (805) 443-2164 to find out when the meeting is scheduled.

TERMS AND ABBREVIATIONS USED IN THIS REPORT

<i>Non-Detects (ND) -</i>	Laboratory analysis indicates that the constituent is not present.
<i>Not Required (NR)-</i>	The water district is not required to collect these because samples are collected by other districts on our behalf.
<i>Parts per million (ppm) or Milligrams per liter (mg/l)</i>	One part per million corresponds to one minute in two years or a single penny in \$10,000.
<i>Parts per billion (ppb) or</i>	One part per billion corresponds to one minute in 2,000 years, or a

<i>Micrograms per liter - Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - Parts per quadrillion (ppq) or Picograms per liter (picograms/l) Picocuries per liter (pCi/L)</i>	single penny in \$10,000,000. One part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000. One part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000. Picocuries per liter is a measure of the radioactivity in water.
<i>Millirems per year (mrem/yr)</i>	Measure of radiation absorbed by the body.
<i>Million Fibers per Liter (MFL)</i>	Million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.
<i>Nephelometric Turbidity Unit (NTU)</i>	Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
<i>Regulatory Action Level</i>	The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.
<i>Maximum Contaminant Level (MCL)</i>	The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
<i>Public Health Goal or PHG</i>	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.
<i>Treatment Technique (TT) -</i>	A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Constituents Tested For and Not Detected

In addition to the information provided in the Summary of Water Quality Results, United Water and / or MWC of Vineyard Avenue Estates monitored for, but did not detect, the following contaminants during 2015:

MTBE	Atrazine
1,1,1-Trichloroethane	Bentazon
1,1,2,2-Tetrachloroethane	Benzene
1,1,2-Trichloro-1,2,2-trifluoroethane	Benzo(a)pyrene
1,1,2-Trichloroethane	Beryllium
1,1-Dichloroethane	Boron
2,4-Dinitrotoluene	Cadmium
2,6-Dinitrotoluene	Carbofuran
1,1-Dichloroethylene	Carbon Tetrachloride
1,2,3-Trichloropropane	Chlordane
1,2,4-Trichlorobenzene	Chromium
1,2-Dichloroethane	Chromium 6
1,2-Dichloropropane	cis-1,2-Di-chloroethylene
1,3-Dichloropropene	Combined Radium
2,3,7,8-TCDD (Dioxin)	Copper
2,4,5-TP (Silvex)	Cyanide
2,4-D	Dalapon
4,4'-DDE	Diazinon
Acetochlor	Di(2-ethylhexyl) adipate
Alachlor	Di(2-ethylhexyl) phthalate
Aluminum	Dibromochloropropane
Antimony	Dichlorodifluoromethane
Asbestos	Dichloromethane

Dinoseb
Disulfoton
Diquat
Diuron
Endothall
Endrin
EPTC
Ethylbenzene
Ethylene dibromide (EDB)
Ethyl-tert-butyl-ether (ETBE)
Foaming Agents-MBAS
Fonofos
Glyphosate
Gross Beta
Heptachlor
Heptachlor epoxide
Hexachlorobenzene
Hexachlorocyclopentadiene
Lead
Lindane
Methoxychlor
Mercury
Molinate (Ordram)
Monochlorobenzene
Nickel
Nitrite
Nitrobenzene

N-Nitrosodimethylamine
o-Dichlorobenzene
Oxamyl (Vydate)
p-Dichlorobenzene
Pentachlorophenol
Perchlorate
Picloram
Proeton
Silver
Simazine
Strontium-90
Styrene
Terbacil
Terbufos
tert-Amyl-methyl-ether (TAME)
Tetrachloroethylene (PCE)
Thallium
Thiobencarb
Toxaphene
trans-1,2-Di-chloroethylene
Trichloroethylene (TCE)
Trichlorofluoromethane
Tritium
Uranium
Vanadium
Vinyl chloride
Xylenes
Zinc

PRIMARY STANDARDS: Mandatory Health Related Standards							
CHEMICALS	STATE MCL mg/l	PHG or (MCLG)	UWCD GROUND WATER RANGE	MWCVAE PRODUCT RANGE	Violation?	Frequency Tested and Typical Source of Chemical or Contaminant	
		Percent of Supply	99.2%	0.8%			
Turbidity (NTU) (TT)	Highest Single Value	% of samples <0.3	0.06 - 0.71	ND - 5	No	Daily; Well Corrosion, Soil Runoff	
MICROBIOLOGICAL							
Total Coliform Bacteria		2 or 5%	ND	ND	No	Weekly; Natural in Environment	
Coliform bacteria monitoring in the Crestview distribution system is required monthly at three locations, and no samples tested positive during the past year.							
DISINFECTION BY-PRODUCTS AND DISINFECTION RESIDUALS							
Haloacetic Acids (ppb) (c)	60	n/a	3 - 7	5.0	No	Quarterly; Byproduct of drinking water disinfection	
Total Chlorine Residual (ppm)	4.00	4.00	1.42 - 3.10	0.35 - 2.50	No	Daily; Drinking water disinfectant added for treatment	
Total Trihalomethanes (ppb) (c)	80	n/a	22.4 - 31.2	34.1	No	Four quarter running average; Byproduct of drinking water disinfection	
INORGANIC CHEMICALS							
Arsenic (ppb)	10	0.004	4 - 5	6	No	Erosion of natural deposits, runoff from orchards	
Boron (ppb)	NA	1000	600 - 700	900	No	Unregulated Annual Testing: No Standard	
Chromium (Total Cr) (ppb)	50	10	ND	4	No	Leaching & Natural Erosion	
Fluoride - Distribution System (ppm) (d)	2.0	1	0.5	0.5	No	Water additive that promotes strong teeth	
Selenium (ppb)	50	50	17 - 20	55	Yes	Erosion of natural deposits	
Nickel	ppb	100	ND	3	No	Annual: Runoff or Natural erosion	
Nitrate (as N) (ppm)	10	10	4.4 - 7.5	36	Yes	Annual: Agricultural Runoff, Septic tanks or Natural erosion	
RADIOACTIVITY (tested every 3 years)							
Gross Alpha Particle Activity (pCi/L)	15	(0)	2.63 - 4.29	9.09 - 14.5	No	2015: Natural erosion. Tested once every three years	
Radon	NA	NA	293 - 347	NA	No	2015: Natural erosion. Tested once every three years	
Uranium	20	0.43	2.6 - 4.26	7.67	No	2015: Natural erosion. Tested once every three years	
SECONDARY STANDARDS: Recommended Aesthetic Standards							
CHEMICALS	SMCL mg/l	Notification Level mg/l	UWCD GROUND WATER RANGE	MWCVAE PRODUCT RANGE	Violation ?	Typical Source of Chemical or Contaminant	
Barium	1000	NS	ND	49.7	No	Leaching & Natural Erosion	
Chloride (ppm)	500		55 - 63	82	No	Leaching & Natural Erosion	
Sulfate (ppm)	500		460 - 570	1020	Yes	Leaching & Natural Erosion	
Total Dissolved Solids (ppm)	1,000		1040 - 1140	2100	Yes	Runoff/ leaching from natural deposits; seawater influence	
pH (pH Units)	NS	NS	7.4	7.4	No	TT	
Hardness (Total Hardness) (ppm)	NS	NS	571 - 597	1240	No	Found in Well & Surface Waters	
Sodium (ppm)	NS	NS	95 - 98	141	No	Leaching & Natural Erosion	
Iron (ppb)	300	NS	ND - 80	60	No	Leaching from natural deposits; industrial waste	
Manganese (ppb)	50	NS	20 - 30	ND	No	Leaching & Natural Erosion	
Magnesium (ppm)	NS	NS	NA	112	No		
Potassium (ppm)	NS	NS	NA	7	No	NS	
Specific Conductance (µS/cm)	1,600		1460 - 1570	2540	Yes	Runoff/ leaching from natural deposits; seawater influence	
Alkalinity (ppm)	NS	NS	NA	280	No	NS	
Total Organic Carbon (ppm)	NS	NS	0.8 - 1.2	ND	No	Leaching from natural organic deposits.	
LEAD & COPPER IN-HOME SAMPLING PROGRAM			Action Level	90% percentile	90% percentile	Violation ?	Source of Chemical or Contamination
Lead	ppb	15	NR	1.3	No		Aug 2015: Internal plumbing corrosion. Tested once every four years
Copper	ppb	1300	NR	1270	No		Aug 2015: Internal plumbing corrosion. Tested once every four years

AL = Federal Regulatory Action Level
CFU/ml = Colony-Forming Units per Milliliter
DLR = Detection Limits for Purposes of Reporting
MCL = Maximum Contaminant Level
MCLG = Maximum Contaminant Level Goal
MFL = Million Fibers per Liter
µS/cm = MicroSiemen per Centimeter
MPN = Most Probable Number

MRDL = Maximum Residual Disinfectant Level
MRDLG = Maximum Residual Disinfectant Level Goal
NA = Not Analyzed
NS = No Standard
NL = Notification Level
ND = None Detected
NTU = Nephelometric Turbidity Units
pCi/L = PicoCuries per Liter
PHG = Public Health Goal

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 Picograms per Liter (pg/L)
RAA = Running Annual Average
SI = Saturation Index (Langlier)
TON = Threshold Odor Number
TT = Treatment Technique

- (a) The turbidity level of the filtered water shall be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1.0 NTU at any time. Wellfield water is not subject to these requirements.
- (b) Total coliform MCLs: No more than 2 monthly samples may be total coliform positive. Fecal coliform/E. coli MCLs: The occurrence of 2 consecutive total coliform positive samples, one of which containing fecal coliform/E. coli, constitutes an acute MCL violation. These MCLs were not violated in 2010.
- (c) The Metropolitan Water District treats their water by adding fluoride to the naturally occurring level in order to help prevent dental caries in consumers. The fluoride levels in the treated water are maintained within a range of 0.7 - 1.3 ppm, as required by Department of Public Health regulations.
- (d) State MCL is 45 mg/L as Nitrate, which equals 10.16 mg/L as Nitrogen.
- (e) The gross beta particle activity MCL is 4 millirem/year annual dose equivalent to the total body or any internal organ. The screening level is 50 pCi/L.
- (f) Compliance for treatment plants that use ozone is based on a running annual average of monthly samples. Wellfield water is not subject to these requirements.
- (g) Compliance is based on a running annual average of quarterly distribution system samples.
- (h) AI measures the aggressiveness of water transported through pipes. Water with AI <10.0 is highly aggressive and would be very corrosive to almost all materials found in a typical water system. AI > 12.0 indicates non-aggressive water. AI between 10.0 and 11.9 indicates moderately aggressive water.