PORT HUENEME WATER AGENCY
2015 ANNUAL WATER QUALITY REPORT TO PURVEYORS

The Port Hueneme Water Agency is committed to providing you with complete and accurate information regarding the safety of the water you drink. The State Water Resources Control Board (SWRCB) requires the Port Hueneme Water Agency (PHWA) to send an Annual Water Quality Report to all customers regarding the water quality they received during the previous calendar year. PHWA tests its water as required by SWRCB regulations and reports these results to SWRCB each month. Additionally, annual SWRCB inspections of the operational policies and procedures at PHWA are conducted. All of this is done to ensure the safety of your drinking water.

This Annual Water Quality Report summarizes the 2015 water quality test results performed by PHWA and Calleguas Municipal Water District (Calleguas). It also includes details about where your water comes from, what it contains, and how it compares to State standards. Water constituents are listed under the appropriate water quality standard and include the maximum contaminant level, federal maximum contaminant level goal or the California public health goal, and the range of results. Water testing is routinely performed for bacteria and protozoan, disinfectant residual, minerals, radioactivity, inorganic and organic chemicals, and other water quality parameters.

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

Where does my water come from?

The water supply for the PHWA treatment plant comes from the United Water Conservation District (United). United's water comes from groundwater located in the El Rio area of Ventura County. This water is pumped from shallow wells drilled into the Oxnard and Fox Canyon aquifers. These two aquifers, which are naturally high in minerals, are fed by the Santa Clara River drainage basin. The drainage basin receives water from various sources such as rivers, streams, wastewater treatment plants, and agricultural runoff.

In October 2001, United completed a source water assessment survey for their water sources. This assessment provides a survey of potential sources of contamination of the groundwater that supplies United's wells. Activities that constitute the highest risk are petroleum storage tanks and fueling operations, septic systems, and abandoned animal feedlots. Groundwater at United is vulnerable to contamination by MTBE, a gasoline additive. No MTBE has been detected in United's wells. United continues to monitor the water quality. Copies of the source water assessment survey are available from United at 805-525-4431.

PHWA's water treatment plant uses two different types of state-of-the-art membrane filtration technologies to treat United's water. These desalination techniques are known as reverse osmosis (RO) and nano-filtration (NF). Three treatment trains

operate side-by-side and each one produces between 1 and 1.5 million gallons of drinking water every day. The treatment process softens the water received from United by lowering the mineral content and minimizes the corrosiveness of the water through the addition of sodium hydroxide. In addition the water is disinfected using chloramines instead of chlorine. Chloramines have better taste, fewer odors, and reduces the formation of trihalomethane in the water, which is a known carcinogen.

Fish owners - you should chemically remove the chloramines in the PHWA water when preparing your fish tank water. Failure to remove the chloramines could result in risk to the aquatic life in the tank.

State water imported by the Metropolitan Water District of Southern California (MWD) is also used at the PHWA treatment plant. MWD water comes from the Sierra Nevada Mountains in northern California and is conveyed through the State Water Project's network of reservoirs, aqueducts, and pump stations. The State water is filtered and disinfected by MWD surface water treatment plants and brought into Ventura County by Calleguas. Calleguas brings the State water to the PHWA treatment plant where it is blended with the treated United water and then delivered to you. The blended water contains about 2.5 parts per million chloramines.

In December 2002, MWD completed its source water assessment of its State Water Project supplies. State Water Project supplies are considered to be most vulnerable to urban/storm water runoff, wildlife, agriculture, recreation, and wastewater. A copy of the assessment can be obtained by contacting MWD at 213-217-6850.

Does my water meet EPA and State standards? Is my tap water safe to drink?

Yes. Your water meets all United States Environmental Protection Agency (USEPA) and SWRCB water quality standards. PHWA did not have any violations of any treatment, monitoring, or reporting requirements during 2015. None of the constituents in the drinking water exceeded the maximum contaminant levels or action levels set by SWRCB or USEPA. The tables in this report list all of the drinking water constituents that were detected during the most recent sampling period as required by SWRCB.

In December 2003, PHWA completed its Vulnerability Assessment of the water facility. This work has improved the security and safety of our water supply.

Is tap water as safe as bottled water?

The Food and Drug Administration (FDA), not the USEPA, regulates bottled water companies. The marketing of the bottled water companies has led consumers to believe that bottled water has higher quality standards than tap water. The FDA does not require bottled water companies to test for the same constituents (such as giardia and asbestos) that the USEPA requires for tap water. Also, the FDA does not have a prohibition on total coliform bacteria. Total coliform bacteria are prohibited in tap water. The FDA does not regulate bottled water companies that bottle and package water within the individual states. It is the responsibility of each state to

regulate its bottled water companies. This accounts for 60-70% of all bottled water companies. Fortunately, California is one of the more progressive states, but as with most of the states, there is a lack of manpower, compared to that provided by USEPA for tap water, for the enforcement of bottled water regulations.

If you do drink bottled water, do the research and educate yourself on the quality of your bottled water. Many people are misled to think that their tap water is not high quality but, in actuality, it is bottled water, which is subject to less rigorous testing and purity standards.

Why are contaminants in my 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 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). In order to ensure that tap water is safe to drink, the USEPA and SWRCB prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. DHS regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

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 some infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The USEPA/Centers for Disease Control 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).

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, wastewater plants 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 it is treated include the following:

- ***Microbial Contaminants*** — Viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- ***Inorganic Contaminants*** — Salts and metals, that can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater

discharges, oil and gas production, mining or farming.

- ***Pesticides & Herbicides*** — May come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- ***Organic Chemicals*** — Including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can, also come from gas stations, urban storm water runoff, agricultural application, and septic systems.
- ***Radioactive Contaminants*** — Can be naturally occurring or be the result of oil and gas production and mining activities.

Radon

Radon is a radioactive gas that you cannot see, taste or smell. It is found throughout the U.S. Radon can move up through the ground and into a home through cracks and holes in the foundation. Radon can build up to high levels in all types of homes. Radon can also get into indoor air when released from tap water from showering, washing dishes and other household activities. Compared to radon entering the home through soil, radon entering the home through tap water will be a small source of radon in indoor air. Radon is a known human carcinogen. Breathing air, containing radon can lead to lung cancer. Drinking water containing radon may also cause increased risk of stomach cancer. If you are concerned about radon in your home, you may test the air in your home. There are simple ways to fix a radon problem that are not too costly. For additional information, call the EPA's Radon Hotline (800-SOS-RADON).

How can I get more information?

For additional information or questions regarding this report, please contact Steven Hickox, the City of Port Hueneme's Water Operations Manager, at (805) 986-6566. The public is always welcome to attend PHWA board meetings. These are held monthly on the 3rd Monday of the month @ 4pm at the City of Port Hueneme Civic Center located at 250 N. Ventura Road.

PORT HUENEME WATER AGENCY

2015 Water Quality Report to Purveyors

Parameter	Units	State MCL [MRDL]	PHG (MCLG) [MRDLG]	State DLR	Range Average	Purchased CMWD (Calleguas)	Purchased UWCD (United)	BWRDF (Blended)	Major Sources in Drinking Water
					Percent of Supply	17%	83%	100%	
PRIMARY STANDARDS--Mandatory Health-Related Standards									
CLARITY (a)									
Combined Filter Effluent Turbidity	NTU	Highest Single Value				0.09	0.71	0.5	
		TT = % of samples <0.3 NTU				100%	50%	0%	Soil runoff
MICROBIOLOGICAL									
Total Coliform Bacteria	(b)	2 or 5.0%	(0)	--	Range	0.0%	0.0%	0.0%	
					Average	0.0%	0.0%	0.0%	Naturally present in the environment
INORGANIC CHEMICALS									
Aluminum	ppb	1000	600	50	Range	ND - 84	0	NA	Erosion of natural deposits;
					Average	ND	0	NA	residue from some water treatment process
Arsenic	ppb	10	0.004	2	Range	3.3	4 - 5	NA	Erosion of natural deposits; runoff from
					Average	3.3	4.5	NA	orchards; electronics production wastes
Treatment-related Fluoride (c)	ppm	2.0	1	0.1	Range	0.7-1.0	0.5	0.48 - 1.21	
					Highest RAA	0.9	0.5	0.89	Water additive that promotes strong teeth
Nitrate (as N)	ppm	10	10	0.4	Range	ND	4.4 - 7.5	5.4	Runoff & leaching from fertilizer use &
					Average	ND	5.7	5.4	sewage; erosion of natural deposits
Selenium	ppb	50	30	5	Range	ND	17 - 20	NA	Discharge from refineries, mines and
					Average	ND	18.5	NA	chemical manufacturers, runoff
RADIOLOGICALS (analyzed every three years, for four consecutive quarters (MWD sampled 2014, CMWD sampled 2015, UWCD sampled 2015)									
Gross Alpha Particle Activity	pCi/L	15	(0)	3.0	Range	ND - 5	2.63 - 4.29	NA	Erosion of
					Average	3	3.24	NA	natural deposits
Gross Beta Particle Activity (d)	pCi/L	50	(0)	4.0	Range	ND - 5	NA	NA	Decay of natural and
					Average	ND	NA	NA	manmade deposits
Uranium	pCi/L	20	0.43	1.0	Range	2.0 - 3.0	2.6 - 4.26	NA	Erosion of
					Average	2	3.55	NA	natural deposits
DISINFECTION BY-PRODUCTS AND DISINFECTANT RESIDUALS									
Bromate (e)	ppb	10	0.1	1.0	Range	ND - 13.0	NA	NA	By-product of drinking water
					Highest RAA	4.3	NA	NA	disinfection
Total Chlorine Residual	ppm	[4.0]	[4]	--	Range	1.2 - 2.7	1.05 -3.20	1.1 - 3.7	Drinking water disinfectant added for
					Highest RAA	2.2	1.87	2.55	treatment
Haloacetic Acids (f)	ppb	60	--	1.0	Range	3.0 - 14.0	3 - 6	1.5 - 6.5	By-product of drinking water
					Highest RAA	7.8	5	3.6	disinfection
Total Trihalomethanes (f)	ppb	80	--	1.0	Range	21.1 - 48.9	22.4 - 31.2	16 - 31	By-product of drinking water
					Highest RAA	34.4	26.0	22	chlorination
SECONDARY STANDARDS--Aesthetic Standards									
Iron	ppb	300	--	100	Range	ND	ND - 80	ND	Leaching from natural deposits;
					Average	ND	40	ND	industrial wastes
Manganese	ppb	50	NL = 500	20	Range	ND	20 - 30	0.008	
					Average	ND	24	0.008	Leaching from natural deposits
Odor Threshold	TON	3	--	1	Range	2	0	5	
					Average	2	0	5	Naturally occurring organic materials
Specific Conductance	µS/cm	1,600	--	--	Range	692 - 703	1460 - 1570	1520	Substances that form ions when in water;
					Average	698	1497.2	1520	seawater influence
Sulfate	ppm	500	--	0.5	Range	108 - 112	460 - 570	450	Runoff/leaching from natural deposits;
					Average	110	507.5	450	industrial wastes
Total Dissolved Solids	ppm	1,000	--	--	Range	405	1040 - 1140	1080	
					Average	405	1094.2	1080	Runoff/leaching from natural deposits
Turbidity (monthly)	NTU	5	--	--	Range	ND	0.06 - 0.71	0.50 - 0.50	
					Average	ND	.13	0.50	Soil runoff
FEDERAL UNREGULATED CHEMICALS REQUIRING MONITORING (UCMR 2)									
Dimethoate	ppb	NS	NS	--	Range	ND	NA	NA	
					Average	ND	NA	NA	
Terbufos sulfone	ppb	NS	NS	--	Range	ND	NA	NA	
					Average	ND	NA	NA	
2,2',4,4'-tetrabromodiphenyl ether	ppb	NS	NS	--	Range	ND	NA	NA	
					Average	ND	NA	NA	
2,2',4,4',5-pentabromodiphenyl ether	ppb	NS	NS	--	Range	ND	NA	NA	
					Average	ND	NA	NA	
2,2',4,4',5,5'-hexabromodiphenyl ether	ppb	NS	NS	--	Range	ND	NA	NA	
					Average	ND	NA	NA	
2,2',4,4,6'-pentabromodiphenyl ether	ppb	NS	NS	--	Range	ND	NA	NA	
					Average	ND	NA	NA	
N-Nitrosodimethylamine (NDMA)	ppt	NS	NS	--	Range	ND - 2.2	NA	NA	
					Average	2.2	NA	NA	
ADDITIONAL PARAMETERS (Unregulated)									
Boron	ppm	NL=1	--	0.1	Range	0.24	600 - 700	0.72	
					Average	0.24	650	0.72	
Calcium	ppm	NS	--	--	Range	36	147 - 148	160	
					Average	36	147.5	160	
Chlorate	ppb	NL=800	--	20	Range	70	NA	NA	
					Average	70	NA	NA	
Chromium (Total)	ppb	50	NONE	10	Range	NA	0 - 2	NA	
					Average	NA	1	NA	
Corrosivity (g)	AI	NS	--	--	Range	12.1 - 12.3	12.1 - 12.2	12.7	
					Average	12.2	12.15	12.7	
Hardness (Total Hardness)	ppm	NS	--	--	Range	114 - 136	571 - 597	610	
					Average	125	584	610	
N-Nitrosodimethylamine (NDMA)	ppt	NL=10	--	--	Range	ND - 2.2	NA	NA	
					Average	2.2	NA	NA	
pH	pH Units	NS	--	--	Range	8.2 - 8.4	7.2 - 7.3	8.2	
					Average	8.3	7.25	8.2	

Potassium	ppm	NS	--	--	Range	2.5 - 2.9	5	6.2	
					Average	2.7	5	6.2	
Radon	pCi/L	NS	--	100.0	Range	ND	293 - 347	NA	
					Average	ND	313.75	NA	
Sodium	ppm	NS	--	--	Range	90 - 92	95 - 98	110	
					Average	91	96.5	110	
Total Organic Carbon	ppm	TT	--	0.3	Range	1.2 - 2.4	0.8 - 1.2	NA	
					Average	1.6	1.03	NA	
Vanadium	ppb	NL=50	--	3	Range	7.7	NA	NA	
					Average	7.7	NA	NA	

ABBREVIATIONS AND NOTES

AI = Aggressiveness Index
AL = Federal Regulatory Action Level
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
ND = None Detected
NL = Notification Level
NS = No Standard
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
TON = Threshold Odor Number
TT = Treatment Technique

CMWD (Calleguas)	Calleguas Municipal Water District- Surface Water Source
UWCD (United)	United Water Conservation District
BWRDF (Blended)	Brackish Water Reclamation Demonstration Facility (BWRDF) - Samples taken after Calleguas and United sources were blended.

(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.

(b) Total coliform MCLs: No more than 5.0% of the monthly samples may be total coliform positive (or 2 samples if a system collects less than 40 samples per month). Calleguas collects less than 40, Metropolitan collects greater than 40. 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 2015.

(c) The Metropolitan Water District treats their water by adding fluoride to the naturally occurring level in order to help prevent dental cavities in consumers. The fluoride levels in the treated water are maintained within a range of 0.6 - 1.2 ppm, as required by State Water Resources Control Board (SWRCB), Division of Drinking Water (DDW).

(d) 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.

(e) Compliance for treatment plants that use ozone is based on a running annual average of monthly samples. UWCD water is not subject to these requirements.

(f) Compliance is based on a running annual average of quarterly distribution system samples.

(g) 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.