

CITY OF SANTA MONICA  
PUBLIC WORKS/WATER RESOURCES DIVISION

# ANNUAL WATER QUALITY REPORT

JUNE 2013



IMPORTANT INFORMATION  
AND TIPS ON WATER QUALITY  
AND SAFETY

<http://waterquality.smgov.net>



## Water Quality Is Everybody's Business

Environmental awareness extends beyond the air we breathe and food we eat. Citizens across the country have asked to be kept informed about the quality of their water. In response, Congress and the California Legislature have passed laws that require water agencies to provide an annual water quality report to their customers.

This report gives an overview of how the City of Santa Monica Public Works/Water Resources Division provides your tap water and explains the many steps we take to ensure the quality and safety of our water.

If you require this report in an alternate format, please call us at (310) 826-6712 or email [myriam.cardenas@smgov.net](mailto:myriam.cardenas@smgov.net).

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

## Dear Santa Monica Residents,

Did you know that the average Santa Monica resident used 134 gallons of water each day during 2012? This is slightly up from previous years reversing a long trend toward lower per capita consumption. Although we've made great strides in improving our water efficiency practices, there's still room for more savings. The greatest opportunity for additional conservation is in outdoor water use, where some simple changes can result in significant water savings. For specific actions you can use, please check out the website [www.sustainablesm.org/water](http://www.sustainablesm.org/water) for detailed instructions and applicable rebate possibilities.

You may remember we initiated a plan last year to be water self-sufficient as a city by the year 2020. This means eliminating the use of water imported from Northern California and the Colorado River. In order to accomplish this, we'll need to maximize local water supplies and continue to use water as efficiently as possible. By accomplishing this, we increase water reliability, reduce pollution, decrease impacts to fish and wildlife, and preserve water for future generations.

Improvements to the City's water treatment facilities make it possible to locally produce up to 70 percent of the water needs of the City in the near future. It's the other 30 percent which represents the "gap" we must close to achieve self-sufficiency. Along with conservation, we're actively pursuing additional supplies to help close this gap. This may include additional wells, rain water capture, and investments in recycled water supply. It may take some work, but by achieving self-sufficiency we can ensure a sustainable water supply for generations to come.

Beyond this exciting task, we continue with the very important and ongoing work of providing safe and pleasant tasting water for Santa Monica residents and businesses. Your City's Public Works/Water Resources Division works diligently to operate and maintain the infrastructure necessary for efficient water delivery and wastewater collection service. We would be delighted to hear from you with any questions or concerns you may have.

Keep drinking the tap water, Santa Monica, and to learn more ways to reduce your water consumption visit [www.sustainablesm.org/water](http://www.sustainablesm.org/water).



Sincerely,

*Gil Borboa*

Gil Borboa  
Water Resources Manager

A photograph of the Santa Monica Water Treatment Plant. The main building is a two-story brick structure with a sign that reads "SANTA MONICA WATER TREATMENT PLANT". To the left, there is a large green cylindrical tank on a raised platform with a metal staircase leading up to it. In the foreground, there are several large blue pipes and valves. In the background, there is a large, dark, arched structure, possibly a covered walkway or another part of the facility. The sky is clear and blue.

Producing Great Tasting  
Good Quality Water

## Santa Monica's Water Treatment Works

The City's new treatment plant has been operating for two years now and has been producing good quality and great tasting water every day.

The water that is treated and eventually pumped to homes and businesses in Santa Monica originates as groundwater in and around Santa Monica. The majority of the groundwater comes from the Charnock Well Field, which has been used as a drinking water source for Santa Monica since 1924.

The well field was shut down for several years when testing revealed that the gasoline additive, Methyl tert-Butyl Ether (MTBE) had infiltrated the aquifer supplying the wells. The source of the gasoline compound was leakage from underground storage tanks at gasoline service stations in the vicinity. The City of Santa Monica pursued restitution and eventually reached a settlement agreement with the principal responsible parties to remediate and restore the well field as a drinking water source.

The Charnock Well Field Restoration Project culminated in the reactivation of the well field and the launching of the new treatment plant in December 2010. A primary component of the treatment works is the Granular Activated Carbon (GAC) filtration system, which removes MTBE and another potential gasoline additive, tert-Butyl Alcohol (TBA) contamination in the groundwater at the Charnock Well Field.



The water from the Charnock Well Field is then combined with the flow from other wells and delivered to the City's main treatment facility in West Los Angeles where it undergoes a 5 step process to reduce any remaining contaminants and achieve drinking water quality.

A major component of the treatment facility is the Reverse Osmosis (RO) softening system and the final adjustments including fluoridation and disinfection. Softening is the process of removing scale-forming calcium and magnesium from hard water. Reverse Osmosis (RO) is a method of softening that separates the scale-forming minerals by forcing hard water through membranes with very small pores.

Water quality is scrutinized throughout the treatment plant with many online analyzers monitoring the process as well as various daily, weekly and monthly samples to verify the quality. The complete treatment process is outlined on the following pages.

This facility is currently producing 52% of the water utilized by Santa Monica with the potential of producing 70% of the water supplied to the city. This greatly reduces our reliance on imported water obtained through the Metropolitan Water District. For more information about the new treatment facilities, please call the plant staff at (310) 826-6712.

# Santa Monica Water Treatment Process

## CHARNOCK WELL FIELD



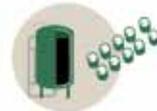
### Charnock Wells

Groundwater contaminated with the gasoline additive MTBE is pumped up from 400 feet below ground surface.



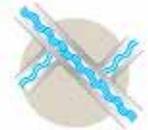
### Greensand Filtration

The well water is filtered through greensand media to remove iron and manganese which would foul the carbon filters.



### GAC Filtration

The MTBE is removed by filtering through Granular Activated Carbon (GAC) filters.



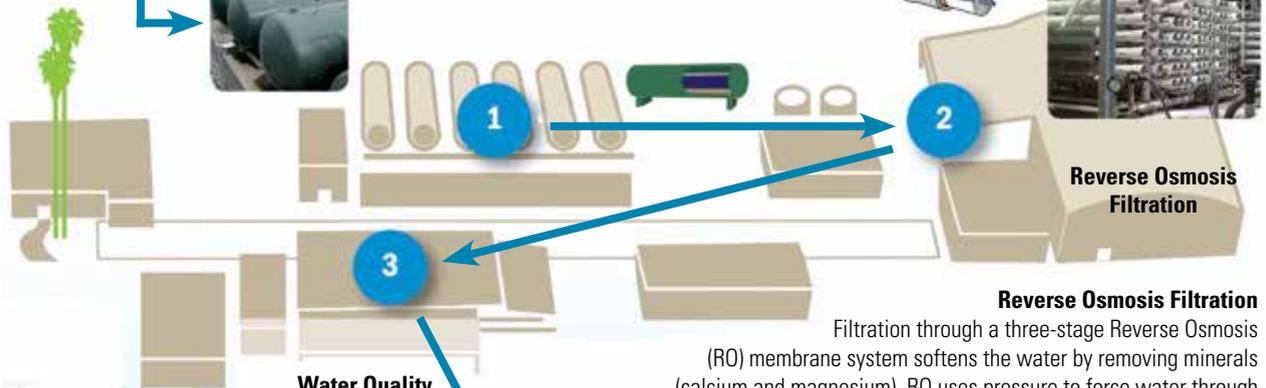
### Pump to Treatment Plant

The filtered water is combined with the flow of other wells and pumped to the Santa Monica Water Treatment Plant.

## SANTA MONICA WATER TREATMENT PLANT

### Pretreatment

To protect the sensitive Reverse Osmosis (RO) filters, the combined well flow is filtered again through greensand and cartridge filters to remove more iron, manganese and any remaining sediment.



### Reverse Osmosis Filtration

### Reverse Osmosis Filtration

Filtration through a three-stage Reverse Osmosis (RO) membrane system softens the water by removing minerals (calcium and magnesium). RO uses pressure to force water through membranes with pores so small the minerals can't pass through.

### Water Quality Adjustments

The mineral content is adjusted to the desired softness. The pH is adjusted, fluoride is added and the water undergoes final disinfection with chloramine.

### Aeration and Storage

The final step, aeration, uses the existing air stripping technology in the five million gallon reservoir to remove any remaining volatile groundwater contaminants such as trichloroethene (TCE).



### Final Delivery

Santa Monica residents and businesses receive water for everyday use. Water conservation by end users is key to ensuring water reliability and sustainability.



# Ensuring the Safety of Santa Monica's Water Supply

Our drinking water meets or exceeds all State and Federal water quality requirements. The safety of Santa Monica's drinking water supply is of paramount importance.

More than 10,000 water quality tests are conducted each year at Santa Monica's State-certified laboratory by qualified chemists and technicians to ensure the safety of the city's supply. The City of Santa Monica Public Works/Water Resources Division expends considerable resources keeping its water treatment system up to date and performing properly.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. Their presence does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA Safe Drinking Water Hotline at (800) 426-4791.



# Sources of Water

The sources of drinking water (both tap and bottled) 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 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:

- Microbial contaminants such as viruses and bacteria, which may come from sewage systems, septic tanks, agricultural livestock operations and wildlife.
- Inorganic contaminants such as salts and metals, which 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 and residential uses.
- Radioactive contaminants, which are naturally occurring.
- Organic chemical contaminants including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production and can also come from gas stations, urban stormwater runoff and septic systems.

In order to ensure that tap water is safe to drink, USEPA and the California Department of Public Health (DPH) prescribe limits on certain contaminants in water provided by public water systems. DPH regulations also establish limits for contaminants in bottled water to provide the same protection for public health.

*\*\* You can help protect the purity of source water by helping control what goes into the storm drain and water table: Reduce use of hazardous products, clean up after pets, recycle used motor oil, sweep walks and alleys instead of hosing.*

*Call (310) 458-8532 to report storm drain pollution and (310) 458-2255 for information on alternatives to toxic cleaning products and pesticides.*

# Our Treated Water

Santa Monica has had to rely on imported water sources for more than 85% of our supply in recent years. However, with the recent restoration of the Charnock Well Field and opening of an enhanced water treatment facility along with continued water conservation, we have the potential to reduce the demand for imported water to 30% of our needs for the coming years.

The imported water we consume is purchased from the Metropolitan Water District (MWD). MWD provides supplemental water to about 300 cities and unincorporated areas in Southern California, importing water from two separate sources. Colorado River water is delivered from Lake Havasu by means of a 242-mile-long aqueduct. This water originates as snowmelt from mountainous regions of Utah, Wyoming and Colorado. MWD also distributes State Project water from the Sacramento-San Joaquin Delta and delivers it to Southern California by means of the 441-mile-long California Aqueduct. Water from the aqueducts is filtered at MWD's six modern treatment plants, using chloramine for disinfection.

In March and June of 2012, MWD completed a source water assessment of its Colorado and State Project supplies. Colorado River supplies are considered to be most vulnerable to recreation, urban/storm water runoff, increasing urbanization in the watershed and wastewater. State 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.



## About the Tables

Santa Monica's water supply undergoes constant, rigorous testing at the Water Treatment Plant by plant operators and chemists at our Water Quality Laboratory. Permission and oversight to operate a community water system is granted by the California Department of Public Health and the U.S. Environmental Protection Agency. Santa Monica has a perfect compliance record in regards to water quality.

The next few pages summarize the past year's results for the tests we are required to perform to satisfy Federal and State regulations for our local well water as well as the water we import. However, testing the water coming out of the treatment plant is not enough. We also test the water at 100 locations throughout the city each month to ensure the quality.

The results are presented in two sections — ***Primary Drinking Water Quality Results*** and ***Secondary Drinking Water Quality Results***. The Primary Results are for the tests we perform for contaminants that may affect the public's health. These contaminants include hazardous chemicals, metals, bacteria, and radioactivity. Santa Monica's water is below permissible Maximum Contaminant Levels (MCL) for all contaminants.

The Secondary Results are for the tests we perform for parameters that may affect the aesthetics of the water such as taste, appearance, and odor. These parameters include turbidity, minerals, and pH among others. Again, Santa Monica's water meets all regulatory requirements for these parameters.

For questions regarding water quality, call the Water Quality Laboratory staff at (310) 826-6712.

## Summary of Results for Primary Drinking Water Standards for 2012

Parameter	PHG/ [MCLG]/ {MRDLG}	State MCL/ {MRDL}	LOCAL WELL WATER Arcadia Plant		SM WELL #1(a)		IMPORTED SURFACE WATER Weymouth Plant		IMPORTED SURFACE WATER Jensen Plant		Dates Sampled if other than 2012(b)	Meets Std	MAJOR SOURCES IN DRINKING WATER	
			Average	Range	Average	Range	Average	Range	Average	Range				
<b>PRIMARY DRINKING WATER STANDARDS (MANDATORY HEALTH-RELATED STANDARDS)</b>														
<b>Clarity</b>														
Maximum Turbidity (NTU)	NS	95% <0.3	N/A	N/A	N/A	N/A	0.04	100% <0.3	0.06	100% <0.3		Y	Soil runoff	
<b>Microbiological</b>														
Total Coliform Bacteria (% positive samples/month)	[0]	5%	City-wide Maximum: 0 Positive Samples									Y	Naturally present in the environment	
Fecal Coliform/E. Coli	[0]	(c)	City-wide Maximum: 0 Positive Samples									Y	Human and animal fecal waste	
<b>Organic Chemical</b>														
Methyl tert-Butyl Ether (MTBE) (ppb)	13	13(5*)	ND	ND	ND	ND	ND	ND	ND	ND		Y	Leaking underground storage tanks	
Trichloroethylene (ppb)	1.7	5	ND	ND - 0.3	ND	ND	ND	ND	ND	ND		Y	Discharge from metal degreasing sites	
<b>Disinfection</b>														
<b>Byproducts &amp; Residuals</b>														
Total Trihalomethanes (ppb)	NS	80	City-wide Average: 11 Range: ND - 46									Y	By-product of drinking water chlorination	
Haloacetic Acids (ppb)	NS	60	City-wide Average: 3 Range: ND - 20									Y	By-product of drinking water chlorination	
Total Chlorine/Chloramines (ppm)	{4}	{4}	City-wide Average: 1.4 Range: 0.2 - 2.6									Y	Drinking water disinfectant added for treatment	
Bromate (ppb)	0.1	10	N/A	N/A	N/A	N/A	N/A	N/A	5.2	3.7 - 6.9		Y	By-product of drinking water ozonation	
<b>Inorganic Chemicals</b>														
Aluminum (ppm)	0.6	1 (0.2*)	ND	ND	ND	ND	0.12	ND - 0.21	0.08	0.06 - 0.11		Y	Erosion of natural deposits; used in water treatment process	
Arsenic (ppb)	0.004	10	ND	ND	0.7	0.7	ND	ND	ND	ND		Y	Erosion of natural deposits	
Barium (ppm)	2	1	0.02	0.02	0.07	0.07	ND	ND	ND	ND		Y	Discharge from oil and metal industries; Erosion of natural deposits	
Copper (d) (ppm)	0.3	AL=1.3 (1.0*)	City-wide 90th percentile: 0.25					0 sites out of 33 exceeded the AL					Y	Corrosion of household plumbing systems
Fluoride After Treatment (ppm)	1	2	Control Range 0.7 - 1.3					City-wide Range 0.7 - 1.1					Y	Water additive for dental health
Lead (d) (ppb)	0.2	AL=15	City-wide 90th percentile: 3.7					1 site out of 33 exceeded the AL					Y	Corrosion of household plumbing systems
Nitrate (as N) (ppm)	10	10	1.2	0.8 - 1.7	3.4	3.4	ND	ND	ND	ND		Y	Runoff from fertilizer use; Leaching from sewage; Erosion of natural deposits	
Perchlorate (ppb)	6	6	ND	ND	ND	ND	ND	ND	ND	ND		Y	Industrial waste discharge	
<b>Radionuclides</b>														
Alpha emitters (pCi/l)	[0]	15	1.9	ND - 3.7	2.3	2.3	ND	ND - 3	ND	ND	2011	Y	Erosion of natural deposits	
Beta/photon emitters (pCi/l)	[0]	50	N/A	N/A	N/A	N/A	4	ND - 6	ND	ND - 4	2011	Y	Decay of natural and man-made deposits	
Combined Radium (pCi/l)	[0]	5	ND	ND	ND	ND	ND	ND	ND	ND	2011	Y	Erosion of natural deposits	
Uranium (pCi/l)	0.43	20	1.7	1.6 - 2.0	0.9	0.9	2	1 - 2	1	ND - 2	2011	Y	Erosion of natural deposits	

### KEY TO ABBREVIATIONS

**Primary Drinking Water Standards** = MCLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

**PHG** = Public Health Goal, or 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.

**MCLG** = Maximum Contaminant Level Goal, or 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.

**MCL** = Maximum Contaminant Level, or 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.

**MRDLG** = Maximum Residual Disinfectant Level Goal, or the level of a drinking water disinfectant below which there is no known or expected risk to health. They do not reflect the benefits of the use of disinfectants to control microbials.

**MRDL** = Maximum Residual Disinfectant Level, or 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.

**N/A** = Not Applicable

**AL** = Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.

**NS** = No Standard

**ND** = Monitored for but Not Detected

**NTU** = Nephelometric Turbidity Units - used to measure cloudiness of drinking water.

**ppb** = parts per billion, or micrograms per liter (µg/l)

**ppm** = parts per million, or milligrams per liter (mg/l)

**pCi/l** = picocuries per liter

\* = secondary standard

**(a)** = SM Well#1 is pumped into a transmission line, is blended with Imported Surface Water and enters the system at 19th St. & Idaho Ave.

**(b)** = We are not required to test for every parameter each year. If indicated, data is from a previous year.

**(c)** = Two consecutive Total Coliform-positive samples, one of which contains Fecal Coliform/E. Coli constitutes an acute MCL violation.

**(d)** = The MCL has been replaced with a treatment technique requiring agencies to optimize corrosion control. Results given are from first draw, at-the-tap monitoring performed every three years.

**For additional water quality questions, contact M. Cardenas, Assistant Manager for Water Production and Treatment at 310-826-6712**

## Summary of Results for Secondary Drinking Water Standards for 2012

Parameter	PHG/ [MCLG]	State MCL	LOCAL WELL WATER Arcadia Plant		SM WELL #1(a)		IMPORTED SURFACE WATER Weymouth Plant		IMPORTED SURFACE WATER Jensen Plant	
			Average	Range	Average	Range	Average	Range	Average	Range
<b>SECONDARY DRINKING WATER STANDARDS (AESTHETIC STANDARDS)</b>										
<b>Chemical Parameters</b>										
Chloride (ppm)	NS	500	28	23 - 31	104	102 - 105	90	85 - 95	56	50 - 63
Color (units)	NS	15	<5	<5	<5	<5	1	1	2	1 - 2
Iron (ppb)	NS	300	ND	ND - 7	11	ND - 20	ND	ND	ND	ND
Manganese (ppb)	NS	50	ND	ND	5	ND - 9	ND	ND	ND	ND
Odor- Threshold (units)	NS	3	<1	<1	<1	<1	2(c)	2(c)	2(c)	2(c)
Specific Conductance (µmho/cm)	NS	1600	378	357 - 400	1319	1305 - 1336	740	350 - 930	440	400 - 500
Sulfate (ppm)	NS	500	52	48 - 55	244	241 - 246	140	130 - 160	48	46 - 50
Total Dissolved Solids (ppm)	NS	1000	208	196 - 220	884	874 - 895	470	450 - 490	260	240 - 280
Turbidity (NTU)	NS	5	0.07	0.05 - 0.10	0.22	0.11 - 0.41	ND	ND	ND	ND - 0.1

Dates Sampled if other than 2012(b)	Meets Std	MAJOR SOURCES IN DRINKING WATER
	Y	Runoff/leaching from natural deposits; industrial wastes
	Y	Naturally-occurring organic materials
	Y	Leaching from natural deposits; industrial wastes
	Y	Leaching from natural deposits
	Y	Naturally-occurring organic materials; chlorine
	Y	Substances that form ions when in water; seawater influence
	Y	Runoff/leaching from natural deposits; industrial wastes
	Y	Runoff/leaching from natural deposits
	Y	Soil runoff

UNREGULATED CHEMICALS REQUIRING MONITORING										
Boron (ppb)	NS	NL=1000	93	93	200	200	130	130	170	170
Chromium VI (ppb)	0.02	NS	0.4	0.4	1.7	1.7	ND	ND	ND	ND
Vanadium (ppb)	NS	NL=50	ND							

ADDITIONAL PARAMETERS										
Alkalinity (ppm)	NS	NS	89	83 - 94	327	326 - 328	95	61 - 120	79	72 - 93
Calcium (ppm)	NS	NS	30	28 - 32	121	115 - 127	46	45 - 48	24	23 - 24
Hardness (as CaCO3) (ppm)	NS	NS	126	118 - 133	556	554 - 558	200	80 - 270	100	98 - 110
Magnesium (ppm)	NS	NS	13	12 - 14	53	53	20	19 - 20	11	11
pH (units)	NS	NS	8.2	8.1 - 8.3	7.2	7.1 - 7.4	8.1	7.9 - 8.6	8.3	7.9 - 8.4
Potassium (ppm)	NS	NS	1.1	1.0 - 1.1	3.2	3.2	3.9	3.7 - 4.1	2.4	2.3 - 2.5
Radon (pCi/l) (d)	NS	NS	ND	ND	440	440	ND	ND	ND	ND
Sodium (ppm)	NS	NS	31	29 - 32	103	103	78	74 - 82	48	43 - 53
1, 4-Dioxane (ppb)	NS	NL=1	0.9	ND - 2.0	ND	ND	N/A	N/A	N/A	N/A
N-Nitrosodimethylamine (NDMA) (ppt)	3	NL=10	N/A	N/A	N/A	N/A	N/A	ND - 2.5	N/A	ND - 2.0
tert-Butyl Alcohol	NS	NL=12	ND	ND	N/A	N/A	ND	ND	ND	ND

**KEY TO ABBREVIATIONS**

**Secondary Drinking Water Standard** = An MCL that applies to any contaminant in drinking water that adversely affects the taste, odor, or appearance of the water.

**PHG** = Public Health Goal or 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.

**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.

**MCL** = Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

**NL** = Notification Level, or the concentration of a contaminant that the California Department of Public Health has determined does not pose not a significant health risk, but warrants notification.

**N/A** = Not Applicable

**NS** = No Standard

**ND** = Monitored for, but Not Detected

**NTU** = Nephelometric Turbidity Units - used to measure cloudiness of drinking water.

**ppb** = parts per billion, or micrograms per liter (ug/l)

**ppm** = parts per million, or milligrams per liter (mg/l)

**ppt** = parts per trillion, or nanograms per liter (ng/l)

**umho/cm** = micromhos per centimeter

**<** = less than

For additional water quality questions, contact M. Cardenas, Assistant Manager for Water Production and Treatment at 310-826-6712

- (a) = SM Well#1 is pumped into a transmission line, is blended with Imported Surface Water and enters the system at 19th St. & Idaho Ave.
- (b) = We are not required to test for each parameter every year. If indicated, data is from a previous year.
- (c) = MWD has developed a flavor-profile analysis method that can more accurately identify odor occurrences.
- (d) = EPA has proposed a limit of 300 pCi/l for Radon.



## Source Water Vulnerability Assessments

Between 2000 and 2012, the California Department of Public Health (DPH) completed Source Water Vulnerability Assessments for all of the City's water wells. The assessments are required for all water utilities nationwide and serve to evaluate the vulnerability of water sources used for drinking water to "possible contaminating activities", which include a wide range of everyday activities in addition to those commonly associated with contamination.

Based on the vulnerability assessments, Santa Monica Wells #3 and #4 located mid-city, Arcadia Wells #4 and #5, and Charnock Wells #13, #16, #18, #19 and #20, located in West L.A. are considered most vulnerable to commercial, industrial, residential and municipal activities.

Santa Monica Well #1, located on the north side, Wells #3 and #4 and the Arcadia Wells are considered most vulnerable by their proximity to sewer collection systems, although analyses have detected no related contamination.

For more information, or to see a copy of the report, contact the Water Resources Division at (310) 826-6712.

## Facts about Cryptosporidium

In recent years, a microscopic organism called Cryptosporidium has been found in surface waters across the country. Cryptosporidium can also be transmitted through contaminated food or direct contact with human or animal waste. The organism can cause a gastrointestinal illness if ingested.

Today's water treatment plants are capable of removing these organisms when present, but 100% elimination cannot be guaranteed. Therefore, a very slight chance of contracting the organism remains. Much research is underway to determine the best way to upgrade treatment plants to improve protection. Our supplier of surface water, MWD, maintains an aggressive program to detect and remove Cryptosporidium from the water it delivers to Santa Monica.

Cryptosporidium need not be a concern for healthy people; however, others may be more vulnerable to contaminants in drinking water. Immuno-compromised persons such as cancer patients undergoing chemotherapy, individuals who have undergone organ transplants, those with HIV/AIDS or other immune system disorders, some elderly and infants can particularly be at risk from infections. These people should seek advice about drinking water from their health care providers. 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 USEPA Safe Drinking Water Hotline (800) 426-4791.



# Answers to the Most Commonly Asked Questions About Your Tap Water



## *What Affects the Taste of My Water?*

The taste of drinking water is affected by its mineral content as well as the presence of chlorine, which is used to protect against potential bacterial contamination. Sometimes plumbing can cause a metallic flavor, especially if the water has been sitting in the pipes for many hours. Taste, however, does not necessarily indicate a higher or lower degree of water quality.

## *How Does My Plumbing Affect the Quality of My Water?*

Plumbing is unlikely to degrade the quality of your water. If your plumbing is old, you may see a discoloration for a few moments after turning on your tap. This is caused by corrosion of iron or copper pipes, depending on your plumbing, and is generally not considered harmful. More serious pipe corrosion will be evident as leaks and breaks start to occur.

## *What Type of Disinfectant Is In My Water?*

A low level of chloramine disinfectant is added to your tap water to protect you from waterborne pathogens. Chloramine is formed when a small amount of ammonia is added to chlorinated water. This type of disinfectant is very stable and also reduces the formation of disinfection by-products in your water. These by-products are an unintended consequence of the disinfection process, but are far below the allowable limit in Santa Monica water. We carefully monitor the amount of the chloramine disinfectant to protect the safety of your water.



## *What about Lead from My Plumbing?*

If your home plumbing contains lead, it could possibly leach into your water as a result of corrosion. Fortunately, the minerals in our water help to protect against pipe corrosion, greatly reducing the potential of lead entering the water. These minerals form a film called “scale” that prevents water from coming into direct contact with home plumbing.

If present however, 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. The City of Santa Monica Public Works/Water Resources Division 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 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 EPA Safe Drinking Water Hotline at (800) 426-4791 or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).



### *What is Chromium 6 And should I be Concerned?*

Hexavalent chromium also known as Chromium 6, has been in the news lately following a report in late 2010 that it was detected in the drinking water of 31 cities across the country. Recently the California EPA instituted a Public Health Goal (PHG) of 0.02 ppb for Chromium 6. The new PHG for Chromium 6 will serve as guidance for the California Department of Public Health in developing the nation's first drinking water standard specifically for Chromium 6 in the future.

Although Chromium 6 is found in industrial processes, it also occurs naturally in groundwater. For the past decade, the Water Quality staff has been monitoring the naturally-occurring levels of Chromium 6 in the city's groundwater wells. Additionally, City staff is tracking the development of a drinking water standard for Chromium 6 closely and will continue their current monitoring program that includes testing of our treated water per recent recommendations from EPA.

For now, customers should be aware that California already has a limit for Total Chromium in drinking water of 50 ppb and that all of the water sources for Santa Monica fall below this limit. Further, the city's new Reverse Osmosis facilities are already providing added protection by reducing the level of natural-occurring Chromium 6 from our ground water.

### *Do I Really Need to Buy a Water Filter or Home Treatment System?*

The decision to buy a water filter or home treatment system is a matter of personal preference. Our water meets or exceeds rigid state and federal health standards. If you decide to buy a filter or system, be a smart shopper and do some homework. Any treatment device you buy should be registered with the National Sanitation Foundation (NSF). There are several system types designed to do different things. Information on treatment systems can be obtained at [www.ConsumerReports.org](http://www.ConsumerReports.org), or from NSF.



*Contact NSF toll free at  
(877) 867-3435  
or visit [www.nsf.org](http://www.nsf.org)*

### *What about Bottled Water?*

Again, the decision is yours. You may find that keeping a pitcher in your refrigerator is a low-cost, water-thrifty alternative to buying more expensive bottled water, and it's far better for the environment. Even when the bottle is reused or recycled, the petrochemicals used in creating the bottle and the transportation of the water has a significant impact on the environment — *and your wallet.*



# Water-Self Sufficiency Goal

Currently, the city uses an average of 12 million gallons a day, but can only produce 8.5 million gallons a day. The additional water needed is purchased and delivered from Northern California or the Colorado River. The City Council has set a goal of water self-sufficiency by 2020, so in order to close this gap between demand and production, we need to save water. The City's Sustainable Water Master Plan will be released in summer 2013 and will include projects, programs and policies to achieve the goal of water self-sufficiency by 2020.

Here are some simple ways you can conserve water and help our community reach the goal:

- Only use sprinklers before 10 am and after 4 pm any day of the week. Adjust your sprinkler controller each season. Go to [www.lacoastalgardens.com](http://www.lacoastalgardens.com) to find out how much water your garden needs and when to water. Even better, convert sprinklers to a drip irrigation system, install a rain barrel, or invest in sustainable landscaping. ***Rebates and grants up to \$5,000 may be available!***
- Don't allow irrigation water to overspray or runoff your property and never use a hose or a leaf blower to clean driveways, sidewalks, patios, streets, or alleys.
- Replace old toilets, showerheads, and clothes washers with high-efficiency models and repair all leaking fixtures on your property.
- Turn off water when brushing teeth or shaving and only wash full loads of laundry.

# Where Can I Get More Information?

City of Santa Monica Public Works/Water Resources Offices:

Water Quality .....	(310) 826-6712
24 hr Water Emergencies.....	(310) 826-6712
Water Conservation.....	(310) 458-8972
Billing Office.....	(310) 458-8224

Visit our website:

[www.smgov.net/departments/publicworks/water.aspx](http://www.smgov.net/departments/publicworks/water.aspx)

Santa Monica City Council Meetings:

2nd & 4th Tuesdays of each month

Council Chamber

1685 Main Street, Santa Monica

[www.smgov.net/cityclerk/council](http://www.smgov.net/cityclerk/council)

Metropolitan Water District of Southern California

(213) 217-6850

[www.mwdh2o.com](http://www.mwdh2o.com)

California Department of Public Health

Division of Drinking Water and Environmental Management

(818) 551-2004

[www.cdph.ca.gov/certlic/drinkingwater](http://www.cdph.ca.gov/certlic/drinkingwater)

U.S. Environmental Protection Agency

Office of Ground Water & Drinking Water

(800) 426-4791 - Safe Drinking Water Hotline

[www.epa.gov/safewater/dwhealth.html](http://www.epa.gov/safewater/dwhealth.html)

<http://water.epa.gov/drink/guide>



WATER SELF-SUFFICIENCY BY 2020

*To learn more on reducing your water use visit*

*[www.sustainablesm.org/water](http://www.sustainablesm.org/water) or call (310) 458-8972.*





City of  
**Santa Monica**

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DEPARTMENT OF PUBLIC WORKS  
WATER DIVISION  
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