# **2011 Annual Drinking Water Quality Report**

#### Spanish (Espanol)

Este informe contiene informacion muy importante sobre la calidad de su agua beber. Traduscalo o hable con alguien que lo intienda bien.

#### Is my water safe?

In 2011, we conducted tests for over 62 contaminants, with 0 detects of contaminants higher than EPA allows. This report is a snapshot of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. We are committed to providing you with information because informed customers are our best allies.

#### Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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. EPA/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 Water Drinking Hotline (800-426-4791). Due to an elevated average on TTHM's and HAA5's these same people may want to consult their health care professional about drinking water.

#### Where does my water come from?

Jetty Creek, a surface water source, has been used by the City since 1968. The current water filtration plant constructed in 2011 is no longer capable of meeting all of today's more stringent requirements for drinking water quality, handed down by state and federal agencies. To prevent potential health risks to its customers and avoid state and federal compliance issues, the City has installed a treatment plant with membrane filtration technology. This new upgraded plant is operational at this time. The Water Department is still making minor corrections to the new plant as is common with any new technology. The filter manufacturer, WesTech, and the City engineer are both working close with plant operators to resolve these issues.

Ground water sources include 2 wells located within the Nedonna Beach aquifer and a 3<sup>rd</sup> at Manhattan Beach.

#### **Current Events and Upgrades:**

As stated above, WesTech personnel, HBH Engineering and City Water Treatment Plant operators are working together to make any needed changes or upgrades to the new filtering process. Plant operations are running smoothly overall and the water quality is superior to the old treatment plants output. Plant and field personnel are working on correcting the high TTHM and HAA5 averages that resulted in the notices that have been sent out in the past few months. Field personnel are flushing water lines more frequently to assure the freshest water in our lines during the winter months when flows are at their lowest. If you happen to encounter some color or sediment in your tap water this is due to the flushing operations. Let your tap run for a few minutes and the sediment should clear up.

Field crews are also installing new valves and in areas with old, leaky valves. This will help to save water and cut the cost of treatment. Crews are also installing some new fire hydrants in areas that had limited hydrant coverage.

A new section of main water line is being installed on Highway 101 north of North 3<sup>rd</sup> Avenue. This new high strength line is replacing and old asbestos/concrete line that has broken several times in the past years and thus has several repair points. This new section of line will save money due to eliminating most repairs and water loss due to broken lines.

#### Source water assessment and its availability

A source assessment has been completed and is available from City Hall upon request, or online at the Cities website at www.rockawaybeachor.us.

#### Why are there contaminants in my 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 water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline (800-426-4791). 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: 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, 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, urban stormwater runoff, and residential uses; organic Chemical Contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems; and radioactive contaminants, which 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, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

**Lead contamination warning:** 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. The Rockaway Beach Water Department 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 drinking 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 form the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

### How can I get involved?

If you have any questions concerning this report or the water system, please contact Public Works Supervisor Mark Gunter at 355-2982. You may also address any issues at the regularly scheduled Public Works Liaison meetings held on the 2nd Tuesday of every month at 3:00 p.m. at Rockaway Beach City Hall, 276 S. Hwy 101.

### Water Quality Data Table

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently.

	MCLG	MCL,						
	or	TT, or	Your	R	ange	Sample		
<u>Contaminants</u>	<u>MRDLG</u>	<u>MRDL</u>	<u>Water</u>	Low	<u>High</u>	<u>Date</u>	<u>Violation</u>	<u>Typical Source</u>
Disinfectants & Disinfection By-Products								
(There is convincin	g evidence th	nat addition	of a disinfed	ctant is neo	cessary fo	or control of	microbial c	ontaminants.)
Haloacetic Acids (HAA5) (ppb) Ave.	NA	60	53.40	32.9	73.9	2011	Yes	By-product of drinking water chlorination

TTHMs [Total Trihalomethanes] (ppb)	NA	80	102.30	55.9	148.7	2011	Yes	By-product of drinking water disinfection	
Inorganic Contamin	ants								
Arsenic (ppb)	0	10	ND	NA	NA	2011	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes	
Asbestos (MFL)	7	7	0.083	NA	NA	2004	No	Decay of asbestos cement water mains; Erosion of natural deposits	
Lead - source water (ppm)		0.015	ND(MPL)	NA	NA	2009	No	Corrosion of household plumbing systems; Erosion of natural deposits	
Nitrate [measured as Nitrogen] (ppm)	10	10	1.1	NA	1.4	2011	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	
Sodium (optional) (ppm)		MPL	23.6	NA	27.5	2011	No	Erosion of natural deposits; Leaching	
Microbiological Con	taminant	s							
Total Coliform (positive samples/month)	0	1	ND	NA	NA	2011	No	Naturally present in the environment	
Long Term 2 Surface Water E.coli (E.coli /100 ml)	50	50	6.63	<1	109	2009	No	Naturally present in raw surface water source environment	
Turbidity (NTU): 10	0% of the	samples we	ere below the T	ГT value	of 0.3.	2011	No	Soil runoff	

Turbidity (NTU):	100% of the samples were below the TT value of $0.3$ .	2011	No	Soil runoff

(A value less than 95% constitutes a TT violation.)

The highest single measurement was 0.61. Any measurement in excess of 1 is a violation unless otherwise approved by the state.

Radioactive Contaminants							
Uranium (ug/L)	0	30	ND	NA	ND 2	011 N	o Erosion of natural deposits
			Your	Sample	# Samples	Exceeds	
<b>Contaminants</b>	<u>MCLG</u>	<u>AL</u>	Water	<b>Date</b>	Exceeding AL	AL	Typical Source
Inorganic Contaminan	ts						
Copper - action level at consumer taps (ppm)	1.3	1.3	0.40	2010	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	0	15	11	2010	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
<u>Contaminants</u>	<u>MRL</u>	<u>AL</u>	<u>Your</u> Water	Sample <u>Date</u>	# Samples <u>Exceeding AL</u>	Exceeds <u>AL</u>	Typical Source
Unregulated Contaminants							
Bromodichloromethane (ppm)	0.0005	NA	0.0064	2010	NA	NA	Organic compound

Chloroform (ppm)	0.0005	NA	0.0047	2010	NA	NA	Organic compound
Dibromochloromethane (ppm)	0.0005	NA	0.0054	2010	NA	NA	Organic compound

	Unit Descriptions						
Term	Definition						
ug/L	ug/L : Number of micrograms of substance in one liter of water						
ppm	ppm: parts per million, or milligrams per liter (mg/L)						
ppb	ppb: parts per billion, or micrograms per liter (µg/L)						
MFL	MFL: million fibers per liter, used to measure asbestos concentration						
NTU	NTU: Nephelometric Turbidity Units. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.						
positive samples/month	Positive samples/month: Number of samples taken monthly that were found to be positive						
NA	NA: not applicable						
ND	ND: Not detected						
NR	NR: Monitoring not required, but recommended.						
	Important Drinking Water Definitions						
Term	Definition						
MCLG	MCLG: Maximum Contaminant Level Goal: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.						
MRL	MRL: Minimum Reporting Level: This is a minimum concentration level in which the lab equipment conducting the test, can accurately read the results. <u>This is not an Oregon DEQ or EPA reporting level</u> .						
MCL	MCL: Maximum Contaminant Level: 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.						
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.						
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.						
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.						
MRDLG	MRDLG: Maximum residual disinfection level goal. 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.						
MRDL	MRDL: Maximum residual disinfectant level. 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.						
MNR	MNR: Monitored Not Regulated						
MPL	MPL: State Assigned Maximum Permissible Level						
E.coli / 100 ml	Number of E.coli colonies per 100 milliliters of raw untreated surface water sample (MCL: 50/100 ml)						

## Violations and Exceedances

There were no violations or exceedances in calendar year 2009.

### For more information please contact:

Mark Gunter, P.O. Box 5, Rockaway Beach, OR 97136 503-355-2982