# 2011 DRINKING WATER QUALITY REPORT



Port of Vancouver USA A CENTURY OF POSSIBILITIES.

This Drinking Water Quality Report contains useful information about the quality of drinking water provided to your organization by the port. As documented within this Report, **the port consistently meets or exceeds federal and Washington State drinking water quality requirements.** 

# PORT'S GROUNDWATER SUPPLY

The port draws its water from the Troutdale Aquifer using three 100-foot deep wells. Two of the wells are primary wells and another is used for backup in the unlikely event of an emergency. All three wells are located within the eastern portion of port property. The port also has two reservoirs that can hold a combined 200,000 gallons of drinking water. The reservoirs are used to temporarily store water after being pumped from the wells.

# PORT DRINKING WATER CUSTOMERS AND WATER USE

The port serves up to approximately 400 people daily. If you or your organization received this Drinking Water Quality Report, you are drinking or using water provided by the port while you are on port property.

Uses of water on port property include domestic uses (e.g. drinking, bathing, toilets), for industrial processes, for facility and vehicle wash down, and for irrigation. In addition, ships may use port water to supplement the ships' potable water supplies.



# GENERAL INFORMATION ABOUT WATER QUALITY

Sources of drinking water (both tap 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 may 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, which can be naturally occurring or result from urban storm water 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 storm water runoff, and residential uses; 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 storm water runoff, and septic systems; 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, the Environmental Protection Agency and/or the Washington State Board of Health prescribes regulations that limit



the amount of certain contaminants in water provided by public water systems. Food and Drug Administration and/ or the Washington State Department of Agriculture Regulations establish limits for contaminants in bottled water that must provide the same protection for public health. 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 Safe Drinking Water Hotline 800-426-4791.

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.

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 two 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 Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

# IMMUNO-COMPROMISED PERSONS

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. Environmental Protection Agency/ 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 800-426-4791.

# WATER QUALITY RESULTS 2011

The port collected samples for more than 60 individual contaminants in 2011 and the table below summarizes the levels of regulated and non-regulated substances detected. All detections were below levels allowed by federal and state agencies. The water quality information presented in the tables is from the most recent round of testing done according to the regulations. All data shown were collected during the last calendar year unless otherwise noted in the tables.

Contaminant	Units	Minimum Detected	Maximum Detected	MCL	MCLG	Likely Contaminant Source
EPA Regulated						
Arsenic*	ppb	1.0	1.5	10	0	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Antimony*	ppb	<1	<1	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Barium*	ppm	.003	.004	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium*	ppb	<0.5	<0.5	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Copper	ppm	.006	0.454	1.3	1.3	Corrosion of domestic plumbing systems; erosion of natural deposits
Lead	ppb	1.07	5.51	15	0	Corrosion of domestic plumbing systems; erosion of natural deposits
Nitrates	ppm	0.51	2.1	10	10	Fertilizers, septic systems, animal waste products
Trichloroethylene	ppb	<0.5	0.52	5	0	Discharge from metal degreasing sites and other factories
Total Trihalomethane (TTHM's)	ppb	<0.5	7.6	80	N/A	Chlorination by-product caused by the reaction of chlorine with organic matter

\*The port tested for these contaminants within the last five years as required by state regulations.

# WATER TERMS AND DEFINITIONS:

#### MAXIMUM CONTAMINANT LEVEL GOAL (MCLG)

The level of contaminant in drinking water below which there is no known or expected health risk.

#### **ACTION LEVEL (AL)**

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

- N/A Not Applicable
- ppb Parts per billion
- **ppm** Parts per million
- ND No contaminants detected
- EPA Environmental Protection Agency

The port maintains a "Group A" Non-Transient/Non-Community (NTNC) potable water system which is regulated under Washington Administrative Code (WAC) Chapter 290 by the Washington State Department of Health (WDOH), Division of Drinking Water. As a precautionary measure, all drinking water supplied by the port is treated with chlorine to help remove some potential contaminants. For more information about groundwater, contact the Washington State Department of Health 800-525-0127.

# PROTECTING THE WATER SUPPLY

The port ensures that the water supply is safe to drink by taking proactive steps to protect the drinking water. For example, the port works with tenants through tenant audits to identify proper chemical management and disposal practices. In addition, the port retrofitted all existing domestic and fire protection connections with backflow prevention devices and installed the highest level devices for all vessel connections at shipping berths. Backflow contamination may occur when contaminants flow back into the water system from a contaminated source. Furthermore, the port developed an Environmental Management System for the wellhead area which port staff use to help identify and implement ways to continue to protect water quality.

# WATER SYSTEM UPGRADES

The port is always looking for ways to continually improve the water system's reliability and address future needs. For example, in 2012, the port will be moving one of the two existing storage tanks a short distance due to a construction project to realign a rail line. The new rail line realignment will allow for increased rail capacity at United Grain Corp. Due to the age of the tank being moved, a new 100,000 gallon tank will replace the old tank of the same size. The new tank will provide additional assurance that the port's reservoirs can be relied on for water storage for many years to come.



#### QUESTIONS AND COMMENTS

If you have any questions regarding drinking water or these results, please call Patty Boyden, Port of Vancouver director of environmental services at 360-693-3611, info@portvanusa.com or visit our website at www.portvanusa.com. If you wish to participate in a public meeting, the Port of Vancouver holds commission meetings on the second and fourth Tuesday of each month, beginning at 9:30 a.m., located in the Commission Room at the port administrative offices, 3103 NW Lower River Road, Vancouver, WA 98660.

### ABOUT THE PORT OF VANCOUVER USA

The Port of Vancouver USA is one of the major ports on the Pacific Coast. Its competitive strengths include available land, versatile cargo handling capabilities, vast transportation networks, a dependable labor force and an exceptional level of service to its customers and community. The Port of Vancouver is in the midst of expanding its rail system and developing new industrial and maritime facilities, leading to vital short term and long term job creation and economic growth. As a major contributor to local and state job generation, the port generates funding to the tax base for its own community and the state of Washington. The port is committed to sustainable business practices and environmental stewardship through a commitment to reduce waste, use renewable energy, preserve wetlands and create enhanced wildlife habitat. For more information, please visit us at www.portvanusa.com.