

2019 Drinking Water Quality Report



The port owns and maintains its own water system that serves tenants, public restrooms, vessels that call on the Port of Vancouver and several of our offices.

The water system is comprised of three major wells that fill two large water storage tanks used to temporarily store the water that is pumped from the wells. The total storage capacity of the two tanks is around 350,000 gallons.

The system also provides fire suppression in warehouses in the event of a fire. We have three state certified employees who are responsible for daily monitoring and maintenance of the equipment and system. We also have a cross-departmental team of professionals that developed an emergency response plan and performs annual response drills to prepare for water system emergencies.

Our water system is regulated by the Washington Department of Health and regular testing is conducted to measure for more than 75 contaminants.

General Information About Water Quality

Sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. The port's water comes from three wells in the Troutdale Aquifer. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals. In some cases, water may also pick up radioactive material and substances resulting from human activity or the presence of animals.

Source water contaminants 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 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 (EPA) 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 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 EPA's Safe Drinking Water Hotline at 800-426-4791 or visiting epa.gov/ground-water-and-drinking-water.

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 epa.gov/safewater/lead.

Immuno-Compromised Persons

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 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 guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available through the Safe Drinking Water Hotline at 800-426-4791.

Protecting the Water Supply

We were one of the first U.S. ports to implement a drinking water Environmental Management System with a comprehensive approach to drinking water protection and contamination prevention. The port's water system provides clean drinking water for industrial tenants, marine vessels, irrigation and fire protection, meeting state and federal health standards.

Water Quality Results 2019

The Port of Vancouver tested samples for more than 75 individual contaminants in 2019. The table below summarizes the levels of regulated substances detected. All detections were below levels allowed by federal and state agencies. The water quality information presented in the table is from testing performed according to regulations. All data shown were collected during the last calendar year unless otherwise noted.

CONTAMINANT	UNITS	MINIMUM DETECTED	MAXIMUM DETECTED	ACTION LEVEL*	MCL	MCLG	LIKELY CONTAMINANT SOURCE
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REQUIRED TESTING AT GROUNDWATER SOURCE

Nitrates (total)	ppm	2.5	3.9	N/A	10	10	Fertilizers, septic systems, animal waste products
Trichloroethylene	ppb	< 0.50	0.63	N/A	5	0	Discharge from metal degreasing sites and other factories

REQUIRED TESTING WITHIN DISTRIBUTION SYSTEM

Coliform Bacteria (total)	colony	0%	0%	N/A	< 5%	0	Naturally occurring bacteria used as an indicator of water quality
Copper	ppm	<.0200	1.51**	1.3		1.3	Corrosion of domestic plumbing systems; erosion of natural deposits
Lead	ppm	<.0010	.012	.015		0	Corrosion of domestic plumbing systems; erosion of natural deposits
Trihalomethanes (total) (TTHMs)	ppb	< 0.50	< 0.50	N/A	80	N/A	By product of drinking water disinfection
Haloacetic Acids (HAA5)***	ppb	1	1	N/A	60	N/A	By product of drinking water disinfection

*Concentration which, if exceeded, triggers treatment or other requirements

** 90 percent of the samples were less than the value shown, so no action was required

***The port tested for these contaminants within the last three years as required by state regulation

WATER TERMS AND DEFINITIONS

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 WDOH at 800-525-0127.

MAXIMUM CONTAMINANT LEVEL (MCL)

The highest level of a contaminant that is allowed in drinking water.

MAXIMUM CONTAMINANT LEVEL GOAL (MCLG)

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



ppb

Parts per billion

ppm

Parts per million

Water System Upgrades Continue

Since 2018, the port has been working to modernize its internal water system. Port tenants and fire systems are served by the water system. Due to the system's substantial span and complexity, a phased approach was best suited.

First steps were made in March 2018, when port contractors removed a 120-foot, 100,000-gallon water tower that had stood as one of the tallest structures in Clark County for nearly 90 years. Next, crews completed excavation for the new at-grade 250,000-gallon tank's foundation, relocated utilities and assembled the new tank.

Currently, the existing gaseous chlorination system used to disinfect potable water is being replaced with an on-site sodium hypochlorite generation (OSHG) system. Chlorination is the process of adding chlorine to drinking water to disinfect it and kill germs. Different processes can be used to achieve safe levels of chlorine in drinking water. The new system will bring the operations up to industry standards not only improving functionality, but overall safety as well. Additionally, this project constructs an extension to the existing booster pump building to house the OSHG system, storage tanks, metering pumps, and analyzers. Wellhouse No. 1 will then be demolished, and modifications to Well No. 1 will be made, such as the installation of ductile iron yard piping and other site improvements.

Next, a fourth booster pump is being installed with variable frequency drive within the existing pump station, increasing the water system's efficiency to keep up with demand.

The final phase of the program will install a backup power generator to replace the existing diesel driven pump to improve the resiliency and dependability of the water system. This phase is tentatively scheduled to take place in Fall of 2021.



About the Port of Vancouver USA

The Port of Vancouver USA is one of the major ports on the Pacific Coast, and its competitive strengths include available land, versatile cargo handling capabilities, vast transportation networks, a skilled labor force and an exceptional level of service to its customers and community.

We believe that a strong economy and healthy environment are vital to a strong region. By incorporating pollution prevention measures, habitat management and sound environmental practices into our daily operations, the port is protecting our natural resources while strengthening the region's economy. 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.

Questions and Comments

If you have any questions regarding drinking water or these results, please call Matt Graves, Port of Vancouver environmental project manager, at 360-693-3611. You may also reach us at info@portvanusa.com or visit our website at www.portvanusa.com.