PFAS: An Emerging Issue for Drinking Water

Per- and polyfluoroalkyl substances, or PFAS, are an emerging issue for water systems across the country. PFAS are human-made chemicals commonly used since the 1950's in a variety of products like firefighting foam, water-resistant clothing, non-stick cookware, cleaning products and more. They don't break down, can travel large distances in water and air, and health experts are concerned about the health risk from accumulation of PFAS in the body over time.

The Port of Vancouver USA is committed to taking action that ensures safe drinking water, and to keeping its water users informed. For small water systems like the port's, Washington state requires testing for the presence of PFAS by December 31, 2025. In advance of the state deadline, the port is working with water quality experts to collect information in the summer of 2024 about the possible presence of PFAS in the port water supply.

Once information is collected, if PFAS is detected and exceeds Washington's "action levels," the port will share that information with users of the port's water and post it to portvanusa.com/PFAS-information. Based on those data, if necessary the port will develop ongoing solutions for monitoring and treatment. Beginning in 2025, the port's Drinking Water Quality Report will include data on PFAS.

To learn more about PFAS, the port's efforts and to access helpful resources, please visit: *https://www.portvanusa.com/environmental-services/water-quality/pfas-information/*

PFAS Sampling Results 2024

CONTAMINANT	UNITS	MINIMUM DETECTED	MAXIMUM DETECTED	ACTION LEVEL*	MCL	LIKELY CONTAMINANT SOURCE	
REQUIRED TESTING AT GROUNDWATER SOURCE							
Perfluorooctanoic Acid (PFOA)	ppt	4.12	6.27	4	10	Discharge from manufacturing and industrial chemical facilities, certain fire fighting activities	
Perfluorootanesulfonic acid (PFOS)	ppt	7.16	12.8	4	15	Discharge from manufacturing and industrial chemical facilities, certain fire fighting activities	
Perfluorononanoic acid (PFNA)	ppt	ND	ND	10	9	Discharge from manufacturing and industrial chemical facilities, certain fire fighting activities	
Perfluorohexanesulfonic acid (PFHxS)	ppt	9.63	14.4	10	65	Discharge from manufacturing and industrial chemical facilities, certain fire fighting activities	
HFPO-DA (commonly referred to as GenX Chemicals)	ppt	ND	ND	10	NE	Discharge from manufacturing and industrial chemical facilities, certain fire fighting activities	
Perfluorobutanesulfonic acid (PFBS)	ppt	5.56	6.87	NE	345	Discharge from manufacturing and industrial chemical facilities, certain fire fighting activities	
Hazard Index (mixtures containing two or more of PFHxS, PFNA, HFPO-DA, and PFBS)	unitless	1	1	1	NE	Discharge from manufacturing and industrial chemical facilities, certain fire fighting activities	

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

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 Port of Vancouver, Environmental Manager Matt Graves at 360-693-3611. You may also reach us at info@portvanusa.com or visit our website at www.portvanusa.com.



➡ Port of Vancouver USA

2024 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. 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-waterand-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 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. 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 2024

The Port of Vancouver tested samples for more than 75 individual contaminants in 2024. 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
REQUIRED TESTING AT GROUNDWATER SOURCE							
Arsenic	ppm	ND	0.0014	N/A	0.01	0	Erosion of natural deposits
Sodium	ppm	9	9.6	N/A			Erosion of natural deposits
Sulfate	ppm	14	15	N/A		250	Erosion of natural deposits, industrial and mining runoff
Chloride	ppm	8.3	9.5	N/A		250	Erosion of natural deposits, industrial runoff
Hardness	ppm	130	130	N/A			Erosion of natural deposits
Conductivity	umhos/ cm	300	300	N/A			Not a contaminant but influenced by dissolved inorganic solids
Turbidity	NTU	0.14	0.29	N/A		N/A	Soil runoff
Calcium	ppm	35	36	N/A			Erosion of natural deposits
Nitrates (total)	ppm	3.9	4.3	N/A	10		Agriculture runoff, industrial waste
Tetrachloroethylene	ppb	ND	0.59	N/A	5	0	Discharge from factories and dry cleaners
Trihalomethanes (total) (TTHMs)	ppb	ND	0.51	N/A	80	N/A	By product of drinking water disinfection
		REOUIRI	ED TESTING		DISTRI		N SYSTEM

REQUIRED TESTING WITHIN DISTRIBUTION STSTEM							
Coliform Bacteria (total)	colony	0%	0%	N/A	< 5%	0	Naturally occuring bacteria used as an indicator of water quality
Copper*	ppm	<.0200	0.88	1.3		1.3	Corrosion of domestic plumbing systems; erosion of natural deposits
Lead*	ppm	<.0010	<.0010	.015		0	Corrosion of domestic plumbing systems; erosion of natural deposits

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

New water terms and definitions

ND = Non Detect
umhos/cm = Micromhos per centimeter
NTU = Nephelometric turbidity unit

The port maintains a "Group A" Non-Transient/Non-Community (NTNC) potable water system which is regulated under Washington Administrative Code (WAC) Chapter 290 the Washington State Department of Health (WDOH), Divisi 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.

NE = not established MCLG = health-based, non-enforceable Maximum Contaminant Level Goals

d by	MAXIMUM CONTAMINANT LEVEL (MCL): The highest level of a contaminant that is allowed in drinking water.								
on n	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)								