

The water quality monitoring results are presented below.

The water sources serving this address are:

Source Name	Origin of Water	Treatment	Region
a) Punaluu Wells II	Groundwater	Chlorination	2
b) Waihee Tunnel	Groundwater	Chlorination	2
c) Waimanalo Tunnels I-IV	Groundwater	Chlorination	2
d) Waimanalo Well II	Groundwater	Chlorination	2

Source Water Monitoring

The substances detected in these sources are shown below. If a substance is not shown, then it was not detected.

Regulated Contaminants (2)

Contaminant	Sample Year	Unit	Highest Average	Range		MCL (Allowed)	MCLG (Goal)	Found in Sources
				Minimum	Maximum			
Barium	2021	ppm	0.006	0.002	0.006	2.000	2.000	a,b,c
Beta/Photon Emitters	2021	pci/l	3.000	3.000	3.000	50.000	0.000	a
Chromium	2021	ppb	1.600	ND	1.800	100.000	100.000	All Sources
Nitrate	2021	ppm	0.410	0.180	0.410	10.000	10.000	b,c,d

- Definitions:**
- 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.
 - 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 allows for a margin of safety.
 - GAC Granular Activated Carbon Filtration
 - Health Advisory An estimate of acceptable drinking water levels for a chemical substance based on health effects information. Health advisory is not a legally enforceable standard.
 - CFU/100ml Colony forming units per 100 milliliter
 - mrem/yr Millirems Per Year (A measure of Radiation)
 - pCi/L Picocuries Per Liter (A measure of Radioactivity)
 - ppb Parts per billion or Micrograms per Liter
 - ppm Parts per million or Milligrams per liter
 - ppt Parts per Trillion or Nanograms per liter
 - NQ Not Quantifiable (<means "less than")
 - NYA Not Yet Applicable
 - N/A Not Applicable
 - ND Not Detected
 - * EPA considers 50 pCi/L to be the level of concern for beta particles
 - (1) Analysis by the State of Hawaii Department of Health
 - (2) Analysis by the Honolulu Board Of Water Supply. Questions, call 748-5370.
 - LRAA Locational running annual average is the average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.
 - MRDL Maximum residual disinfectant level: The highest level of a disinfectant allowed in drinking water.
 - MRDLG Maximum residual disinfectant level goal: The level of a drinking water disinfectant below which there is no known or expected risk to health.

Unregulated Contaminants (Do not have designated maximum limits but require monitoring)

Contaminant	Tested By	Sample Year	Unit	Highest Average	Range		Health Advisory	Found in Sources
					Minimum	Maximum		
Chlorate	(2)	2021	ppb	34.000	17.000	34.000	210.000	a,b,d
Chloride	(2)	2021	ppm	190.000	16.000	190.000	250 **	All Sources
Chromium, Hexavalent	(2)	2021	ppb	2.000	1.300	2.000	13.000	All Sources
Sodium	(2)	2021	ppm	34.000	13.000	34.000	60.000	All Sources
Strontium	(2)	2021	ppb	280.000	50.000	280.000	4000.000	All Sources
Sulfate	(2)	2021	ppm	19.000	2.500	19.000	250 **	All Sources
Vanadium	(2)	2021	ppb	22.000	5.700	22.000	21.000	All Sources

**Secondary Maximum Containment Levels (SMCLs) are standards established as guidelines to assist public water systems in managing the aesthetics quality (taste, odor, and color) of drinking water. EPA does not enforce SMCLs.

Distribution System Monitoring

Disinfection By-Products (2)

System Name	Contaminant	Unit	Min	Max	Highest LRAA	MCL (Allowed)	MCLG (Goal)
Honolulu-Windward-Pearl Harbor	Total Trihalomethanes	ppb	0.00	16.00	9.00	80	None
	Haloacetic Acids (HAA5)	ppb	0.00	15.00	3.88	60	None
		Unit	Min	Max	Average	MCL (Allowed)	MCLG (Goal)
	Haloacetic Acids (HAA6BR)	ppb	0.00	1.50	0.82	NYA	NYA
	Haloacetic Acids (HAA9)	ppb	0.00	1.50	0.82	NYA	NYA

Microbial Contaminants (2)

System Name	Contaminant	Number of positive E. coli samples found	Violation (Yes/No)	Number of assessments required to perform	Major sources in drinking water
Honolulu-Windward-Pearl Harbor	E. Coli	0	No	0	Human and animal fecal waste

Level 1 Assessment: A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

Residual Chlorine (2)

System Name	Sample Year	Unit	Lowest Monthly Average	Highest Monthly Average	Running Annual Average	MRDL	MRDLG
Honolulu-Windward-Pearl Harbor	2021	ppm	0.28	0.31	0.30	4	4

Lead/Copper Testing (2)

Contaminant	Sample Year	Unit	90th Percentile Reading	Action Level	# Samples Above Action Level
Lead	2021	ppb	<1.000	15.000	0
Copper	2021	ppm	0.039	1.300	0

No violations found for calendar year 2021