

MIAMI-DADE WATER & SEWER DEPARTMENT

2024 WATER QUALITY DATA

PARAMETER	FEDERAL MCL (a)	FEDERAL GOAL (b)	STATE MCL	YEAR TESTED	MAIN SYSTEM	MCL VIOL Y/N	SOUTH DADE WATER SUPPLY SYSTEM	MCL VIOL Y/N	NMB WATER	MCL VIOL Y/N	REDAVO	MCL VIOL Y/N	MAJOR SOURCES
MICROBIOLOGICAL CONTAMINANTS													
Total Coliform Bacteria (C)	TT	0	TT	24 (h)	0	NO	0	NO	ND	NO	0	NO	Naturally present in the environment
DISINFECTION BYPRODUCTS													
Total Trihalomethanes (ppb) (d)(e)	80	N/A	80	24 (h)	51 (10-69)	NO	51 (11-71)	NO	11 (3-27)	NO	49 (43-54)	NO	Byproduct of drinking water chlorination
Haloacetic Acids (ppb) (d)(e)	60	N/A	60	24 (h)	44 (3-81)	NO	19 (2-30)	NO	14 (3-34)	NO	18 (7-29)	NO	Byproduct of drinking water chlorination
DISINFECTANTS													
Chloramines (ppm) (f)	MRDL=4	MRDLG=4	MRDL=4	24 (h)	2.7 (0.1-4.0)	NO	N/A	N/A	3.7 (0.6-4.2)	NO	N/A	N/A	Water additive used to control microbes
Chlorine (ppm) (f)	MRDL=4	MRDLG=4	MRDL=4	24 (h)	N/A	N/A	1.6 (0.3-2.6)	NO	N/A	N/A	1.0 (0.4-2.6)	NO	Water additive used to control microbes
INORGANIC CONTAMINANTS													
Antimony (ppb)	6	6	6	24 (h)	0.1(0.05-0.1)	NO	0.5(0.07-0.5)	NO	ND	NO	ND	NO	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
Arsenic (ppb)	10	0	10	24 (h)	2 (0.6-2)	NO	2 (0.4-2)	NO	ND	NO	ND	NO	Erosion of natural deposits
Barium (ppm)	2	2	2	24 (h)	0.008 (0.005-0.008)	NO	0.02 (0.01-0.02)	NO	ND	NO	0.012 (0.011 - 0.012)	NO	Erosion of natural deposits
Chromium (ppb)	100	100	100	24 (h)	2 (ND-2)	NO	0.8 (0.4-0.8)	NO	ND	NO	ND	NO	Erosion of natural deposits
Copper (ppm) (g) (at tap)	AL = 1.3	1.3	AL = 1.3	23 ¹ , 24 (h)	0.07, 0 homes out of 102 (0%) exceeded AL ¹	NO	1.0, 2 homes out of 37 (5%) exceeded AL ¹	NO	0.06, 1 home out of 50 (0%) exceeded AL	NO	1.1, 2 homes out of 35 (6%) exceeded AL	NO	Corrosion of household plumbing systems
Fluoride (ppm) (i)	4	4	4	24 (h)	1 (0.5-1)	NO	0.2(0.1-0.2)	NO	0.5	NO	0.8 (0.12 - 0.8)	NO	Erosion of natural deposits; water additive which promotes strong teeth
Lead (ppb) (g) (at tap)	AL = 15	0	AL = 15	23 ¹ , 24 (h)	3.2, 1 home out of 102 (1%) exceeded AL ¹	NO	1.1, 0 homes out of 37 (0%) exceeded AL ¹	NO	0.0, 0 homes out of 50 (0.0%) exceeded AL	NO	1.1, 0 homes out of 35 (0%) exceeded AL	NO	Corrosion of household plumbing systems
Nitrate (as N) (ppm)	10	10	10	24 (h)	0.3 (0.009-0.3)	NO	7 (2-7)	NO	0.15	NO	2.60 (1.86 - 2.60)	NO	Erosion of natural deposits; Runoff from fertilizer use
Nitrite (as N) (ppm)	1	1	1	24 (h)	0.2 (ND-0.2)	NO	ND	NO	ND	NO	ND	NO	Erosion of natural deposits; Runoff from fertilizer use
Selenium (ppb)	50	50	50	24 (h)	0.7 (ND-0.7)	NO	0.8(ND-0.8)	NO	ND	NO	ND	NO	Erosion of natural deposits
Sodium (ppm)	NE	N/A	160	24 (h)	33 (23-33)	NO	27 (17-27)	NO	31	NO	30 (26 - 30)	NO	Erosion of natural deposits and sea water
Thallium (ppb)	2	0.5	2	24 (h)	ND	NO	0.02(0.01-0.02)	NO	ND	NO	ND	NO	Leaching from ore-processing sites; discharge from electronics, glass, and/or drug factories
SYNTHETIC ORGANIC CONTAMINANTS													
Pentachlorophenol (ppb)	1	0	1	24 (h)	ND	NO	0.024(ND-0.024)	NO	0.038 (ND-0.038)	NO	ND	NO	Discharge from wood preserving factories
RADIOACTIVE CONTAMINANTS													
Alpha Emitters (pCi/L)	15	0	15	24 (h)	ND	NO	5(ND-5)	NO	ND	NO	2.2 (2.1 - 2.2)	NO	Erosion of natural deposits
Combined Radium (pCi/L)	5	0	5	24 (h)	ND	NO	1 (ND-1)	NO	ND	NO	0.8 (ND - 0.8)	NO	Erosion of natural deposits
Uranium (ppb)	30	0	30	24 (h)	0.6 (ND-0.6)	NO	9 (0.7-9)	NO	ND	NO	1.9 (1.15 - 1.9)	NO	Erosion of natural deposits
Radon (pCi/L)	NE	NE	NE	24 (h)	197 (ND-197)		149(ND-149)		ND		NR		

ABBREVIATIONS & NOTES

AL = Action Level
 MRDL = Maximum Residual Disinfectant Level
 MRDLG = Maximum Residual Disinfectant Level Goal
 N/A = Not Applicable
 ND = Not Detected
 NE = None Established
 pCi/L = picoCuries per Liter
 POE = Point of Entry to the Distribution System
 ppb = parts per billion or micrograms per liter (µg/L)
 ppm = parts per million or milligrams per liter (mg/L)
 () = Ranges (low - high) are given in parentheses where applicable.
 The value preceding the parentheses is the highest detected level reported for the monitoring period except for disinfection byproducts and disinfectants, where the running annual average or locational running annual average is reported.
 TT= Treatment Technique
 Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your healthcare provider.

- (a) MCL = Maximum Contaminant Level
- (b) Federal Goal = MCLG = Maximum Contaminant Level Goal
- (c) Total Coliform positive samples should only be reported if there is an accompanying TT (Treatment Technique) violation.
A minimum of 420 samples for total coliform bacteria testing are collected each month from the Main distribution system (55 samples from the South Dade Water Supply distribution system) in order to demonstrate compliance with regulations.
- (d) A total of 32 samples for Total Trihalomethane and Haloacetic Acid testing are collected per year from the Main distribution system (6 from the Aventura distribution system) in order to demonstrate compliance with State regulations. Compliance is based on a locational running annual average. This is the value which precedes the parentheses.
- (e) A total of 16 samples for Total Trihalomethane and Haloacetic Acid testing are collected per year from the South Dade Water Supply distribution system in order to demonstrate compliance with State regulations. Compliance is based on a locational running annual average. This is the value which precedes the parentheses.
- (f) Compliance is based on a running annual average, computed quarterly from monthly samples collected during total coliform bacteria testing.
- (g) 90th percentile value reported. If the 90th percentile value does not exceed the AL (i.e., less than 10% of the homes have levels above the AL), the system is in compliance and is utilizing the prescribed corrosion control measures.
- (h) Data presented is from the most recent testing conducted for these parameters in accordance with regulations.
- (i) Fluoride testing to demonstrate compliance with State regulations is required every 3 years in accordance with the State's monitoring

Per- and polyfluoroalkyl substances (PFAS) can persist in the human body and exposure may lead to increased risk of adverse health effects. Low levels of multiple PFAS that individually would not likely result in increased risk of adverse health effects may result in adverse health effects when combined in a mixture. Some people who consume drinking water containing mixtures of PFAS in excess of the Hazard Index (HI) MCL may have increased health risks such as liver, immune, and thyroid effects following exposure over many years and developmental and thyroid effects following repeated exposure during pregnancy and/or childhood.

*While initial compliance monitoring for PFAS is currently underway, our systems are taking measures to comply with the new PFAS MCLs within five years after the date of rule promulgation. Since systems must complete initial monitoring within three years of rule promulgation, systems will be required to report results and other required information in CCRs beginning with 2027 reports. As the MCL compliance date is set at five years following rule promulgation, systems will be required to report MCL violations in the CCR, accompanied by the required health effects language (as shown above) and information about violations, starting in 2029.

2024 ADDITIONAL CONTAMINANTS MONITORING*

PARAMETER	FEDERAL MCL (a)	FEDERAL GOAL (b)	STATE MCL	YEAR TESTED	MAIN SYSTEM	MCL VIOL Y/N	SOUTH DADE WATER SUPPLY SYSTEM	MCL VIOL Y/N	NMB WATER	MCL VIOL Y/N	REDAVO	MCL VIOL Y/N	MAJOR SOURCES
Hazard Index PFAS (HFPO-DA, PFBS, PFHxS, and PFNA) (unitless)	1	1	1	24 (h)	1.1(0.2-1.3)	N/A*	0.4(0.1-0.5)	N/A*	NA	N/A*	N/A	N/A*	Discharge from manufacturing and industrial chemical facilities, use of certain consumer products, occupational exposures, and certain firefighting activities
Perfluorooctane sulfonate (PFOS) (ppt)	4	0	4	24 (h)	31 (7-31)	N/A*	35 (15-35)	N/A*	N/A	N/A*	35 (19 - 35)	N/A*	
Perfluorooctanoic acid (PFOA) (ppt)	4	0	4	24 (h)	16 (3-16)	N/A*	11 (ND-11)	N/A*	N/A	N/A*	1.6 (0.5 - 1.6)	N/A*	
perfluorononanoic acid (PFNA) (ppt)	10	10	10	24 (h)	5(ND-5)	N/A*	0.9(ND-0.9)	N/A*	NA	N/A*	0.9 (ND - 0.9)	N/A*	
perfluorohexanesulfonic acid (PFHxS) (ppt)	10	10	10	24 (h)	10(1-10)	N/A*	4(1-4)	N/A*	NA	N/A*	2.5 (1.8 - 2.5)	N/A*	

*: This separate table contains contaminants for which regulatory standards have been recently promulgated and initial regulatory compliance monitoring is currently underway.

ND = Not Detected
 NE = None Established
 NR = Not Required
 ppt = parts per trillion