

**MIAMI-DADE WATER & SEWER DEPARTMENT  
2021 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	BAL HARBOUR VILLAGE	MCL VIOL Y/N	REDAVO	MCL VIOL Y/N	MAJOR SOURCES
<b>MICROBIOLOGICAL CONTAMINANTS</b>													
Total Coliform Bacteria (c)	TT	0	TT	21 (h)	0	NO	0	NO	0	NO	0	NO	Naturally present in the environment
<b>DISINFECTION BYPRODUCTS</b>													
Total Trihalomethanes (ppb) (d)(e)	80	N/A	80	21 (h)	55 (10-63)	NO	57 (13-66)	NO	11(6-10)	NO	52 (44-60)	NO	Byproduct of drinking water chlorination
Haloacetic Acids (ppb) (d)(e)	60	N/A	60	21 (h)	48 (12-54)	NO	16 (3-19)	NO	12 (7-17)	NO	16 (14-18)	NO	Byproduct of drinking water chlorination Byproduct of drinking water chlorination Byproduct of drinking water chlorination
<b>DISINFECTANTS</b>													
Chloramines (ppm) (f)	MRDL=4	MRDLG=4	MRDL=4	21 (h)	3.1 (0.1-4.7)	NO	N/A	N/A	3.1 (0.1-4.7)	NO	N/A	N/A	Water additive used to control microbes
Chlorine (ppm) (f)	MRDL=4	MRDLG=4	MRDL=4	21 (h)	N/A	N/A	1.7 (0.3-2.5)	NO	N/A	N/A	1.2 (0.5-1.3)	NO	Water additive used to control microbes
<b>INORGANIC CONTAMINANTS</b>													
Antimony (ppb)	6	6	6	21 (h)	0.1 (0.1)	NO	0.5 (0.1-0.5)	NO	0.1 (0.1)	NO	ND	NO	Discharge from fire retardants, electronics, solder
Arsenic (ppb)	10	0	10	21 (h)	2 (1-2)	NO	2 (1-2)	NO	2 (1-2)	NO	0.6 (0.4-0.6)	NO	Erosion of natural deposits
Barium (ppm)	2	2	2	21 (h)	0.01 (0.003-0.01)	NO	0.02 (0.01-0.02)	NO	0.01 (0.003-0.01)	NO	0.013 (0.013-0.013)	NO	Erosion of natural deposits
Chromium (ppb)	100	100	100	21 (h)	0.3 (ND-0.3)	NO	0.8 (0.4-0.8)	NO	0.3 (ND-0.3)	NO	0.7(0.5-0.7)	NO	Erosion of natural deposits
Copper (ppm) (g) (at tap)	AL = 1.3	1.3	AL = 1.3	20/21 (j)(h)	0.06, 0 homes out of 101 (0%) exceeded AL	NO	1.1, 3 homes out of 41 (7%) exceeded AL	NO	0.16, homes out of 10 (0%) exceeded AL 0.16, 0 hogares de 10 (0%) excedieron AL	NO	1.38, 7 homes out of 47 (15%) exceeded AL*	NO*	Corrosion of household plumbing systems
Fluoride (ppm) (i)	4	4	4	21 (h)	0.9 (0.6-0.9)	NO	0.1 (0.1)	NO	0.9 (0.6-0.9)	NO	0.8 (0.2-0.8)	NO	Erosion of natural deposits; water additive which promotes strong teeth
Lead (ppb) (g) (at tap)	AL = 15	0	AL = 15	20/21 (j)(h)	3.6, 1 home out of 101 (1%) exceeded AL	NO	2.2, 1 home out of 41 (2%) exceeded AL	NO	0.16, homes out of 10 (0%) exceeded AL 0.16, 0 hogares de 10 (0%) excedieron AL	NO	0.6, 0 homes out of 47 (0%) exceeded AL	NO	Corrosion of household plumbing systems
Nitrate (as N) (ppm)	10	10	10	21 (h)	0.2 (0.03-0.2)	NO	6.8 (1.5-6.8)**	NO	0.2 (0.03-0.2)	NO	2.71 (1.77-2.71)	NO	Erosion of natural deposits; Runoff from fertilizer use
Nitrite (as N) (ppm)	1	1	1	21 (h)	0.04 (ND-0.04)	NO	ND	NO	0.04 (ND-0.04)	NO	ND	NO	Erosion of natural deposits; Runoff from fertilizer use
Selenium (ppb)	50	50	50	21 (h)	0.9 (ND-0.9)	NO	1.4 (1.0-1.4)	NO	0.9 (ND-0.9)	NO	ND	NO	Erosion of natural deposits
Sodium (ppm)	NE	N/A	160	21 (h)	36 (22-36)	NO	28 (18-28)	NO	36 (22-36)	NO	28 (26-28)	NO	Erosion of natural deposits and sea water
Manganese (ppm)	50	50	50	21 (h)	5.1 (0.6-5.1)	NO	2.3 (ND-2.3)	NO	5.1 (0.6-5.1)	NO	0.002 (ND-0.002)	NO	Erosion of natural deposits
<b>SYNTHETIC ORGANIC CONTAMINANTS</b>													
2,4-D (ppb)	70	70	70	21 (h)	0.2 (ND-0.2)	NO	ND	NO	0.2 (ND-0.2)	NO	ND	NO	Runoff from herbicide used on rights of way
Dalapon (ppb)	200	200	200	21 (h)	0.6 (ND-0.6)	NO	ND	NO	0.6 (ND-0.6)	NO	N/A	NO	Runoff from herbicide used on rights of way
<b>RADIOACTIVE CONTAMINANTS</b>													
Alpha Emitters (pCi/L)	15	0	15	21 (h)	ND	NO	8 (ND-8)	NO	ND	NO	ND	NO	Erosion of natural deposits
Combined Radium (pCi/L)	5	0	5	21 (h)	ND	NO	ND	NO	ND	NO	1.4 (1.1-1.4)	NO	Erosion of natural deposits
Uranium (µg/L)	30	0	30	21 (h)	1.0 (ND-1.0)	NO	11 (0.8-11)	NO	1.0 (ND-1.0)	NO	1.8(1.0-1.8)	NO	
Radon (pCi/L)	NE	NE	NE	21 (h)	235 (ND-235)		256 (ND-256)		235 (ND-235)		N/A		
<b>ABBREVIATIONS &amp; NOTES</b>										<p>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.</p>			
					<p>(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 for the Main System, South Dade System and North Miami Beach System 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 framework. However, fluoride levels are monitored daily for the Main System treatment plants where fluoride is added to promote strong teeth.          (j) The 20/21 data presented for the Main System and South Dade System is from the most recent testing conducted in accordance with regulations. Both systems are under reduced monitoring.</p>					<p>*We constantly monitor for various contaminants in the water supply to meet all regulatory requirements. This includes monitoring for copper at customers' taps. In July-August 2021, 7 out of 47 homes in Redavo had copper levels that exceeded the action level (AL) of 1.3 ppm. Because the 90th percentile results exceeded the AL in the Redavo area system, the system exceeded the AL. The AL exceeded was not a violation, but a trigger for additional steps a system must take. Our system complied with, or is in the process of complying with, all required follow-up to this exceedance, which includes the application of a corrosion control system.</p>			
					(t) Plant undergoing free chlorination: free chlorine=0.3 mg/L.								

2021 ADDITIONAL CONTAMINANTS MONITORING <sup>1</sup>													
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
Perfluorooctane sulfonate (ppt)	NE	NE	NE	21 (h)	34 (11-34)	N/A	37 (19-37)	N/A	N/A	N/A	17 (17)	N/A	Discharge/runoff from manmade products
Perfluorooctanoic acid (ppt)	NE	NE	NE	21 (h)	11 (4-11)	N/A	10 (1-10)	N/A	N/A	N/A	1 (1)	N/A	Discharge/runoff from manmade products

<sup>1</sup>: This separate table contains contaminants which MDWASD tested voluntarily and which are not currently regulated.

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