

BOTTLED WATER TESTING REQUIREMENTS

The Florida Department of Agriculture and Consumer Services (FDACS) permits and regulates Bottled Water Facilities.

Chapter 500, Florida Statutes and Chapter 5K-4, Florida Administrative Code
Code of Federal Regulations Title 21, CFR, Parts: 101, 117, 129 and 165

Full testing requirements and approved methods can be found in 21 CFR 165.110. The following is a summary of the biological, chemical and radiological testing requirements.

Biological

The product shall be tested weekly for coliforms. Results must be:

- ≤ 1.0 coliforms/100 ml for membrane filtration method
- ≤ 9.2 MPN/100 ml for Most Probable Number method

Physical

The product shall be tested annually for physical contaminants.

- The turbidity of the product shall not exceed 5 units.
- The color of the product shall not exceed 15 units (mineral water exempted)

Radiological

The product shall be tested annually for radiological contaminants. Particle and maximum allowable concentrations are on the following table:

Particle or Contaminant	maximum allowable concentrations
Radium 226 & 228	5 picocuries/L (combined)
Alpha particle	15 picocuries/L (including Radium-226, excluding Radon and Uranium)
Beta Particle	See below
Photon Radioactivity	See below
Uranium	30 micrograms/L

The bottled water shall not contain beta particle and photon radioactivity from manmade radionuclides in excess of that which would produce an annual dose equivalent to the total body or any internal organ of 4 millirems per year calculated on the basis of an intake of 2 liters of the water per day. If two or more



beta or photon-emitting radionuclides are present, the sum of their annual dose equivalent to the total body or to any internal organ shall not exceed 4 millirems per year.

Chemical

The product shall be tested annually for a variety of chemicals and compounds. Specific chemicals, with maximum allowable concentrations can be found on the following tables:

Chemical Substance	Concentration (mg/L)
Chloride*	250.0
Iron*	0.3
Manganese*	0.05
Phenols	0.001
Total Dissolved Solids (TDS)*	500.0
Zinc*	5.0
Fluoride	based on temperature (see CFR for details)

*Mineral Water is exempt from allowable levels.

EPA secondary max containment chemicals	Concentration (mg/L)
Aluminum	0.2
Silver	0.1
Sulfate*	250

*Mineral Water is exempt from allowable levels.

Residual Disinfectants and Byproducts	Concentration (mg/L)
Bromate	0.010
Chlorite	1.0
Haloacetic acids (five) (HAA5)	0.060
Total Trihalomethanes (TTHM)	0.080
Chloramine	4.0 (as Cl ₂)
Chlorine	4.0 (as Cl ₂)
Chlorine dioxide	0.8 (as ClO ₂)

Inorganic Substances	Concentration (mg/L - or as specified)
Arsenic	0.01
Antimony	0.006
Barium	2
Beryllium	0.004
Cadmium	0.005
Chromium	0.1
Copper	1
Cyanide	0.2
Lead	0.005
Mercury	0.002
Nickel	0.1
Nitrate	10 (as nitrogen)
Nitrite	1 (as nitrogen)
Total Nitrate and Nitrite	10 (as nitrogen)
Selenium	0.05
Thallium	0.002

Volatile Organic Chemicals (VOC's)	Concentration (mg/L)
Benzene (71-43-2)	0.005
Carbon tetrachloride (56.23.5)	0.005
o-Dichlorobenzene (95-50-1)	0.6
p-Dichlorobenzene (106-46-7)	0.075
1,2-Dichloroethane (107-06-2)	0.005
1,1-Dichloroethylene (75-35-4)	0.007
cis-1,2-Dichloroethylene (156-59-2)	0.07
trans-1,2-Dichloroethylene (156-60-5)	0.10
Dichloromethane (75-09-2)	0.005
1,2-Dichloropropane (78-87-5)	0.005
Ethylbenzene (100-41-4)	0.7
Monochlorobenzene (108-90-7)	0.1
Styrene (100-42-5)	0.1
Tetrachloroethylene (127-18-4)	0.005
Toluene (108-88-3)	1
1,2,4-Trichlorobenzene (120-82-1)	0.07
1,1,1-Trichloroethane (71-55-6)	0.20
1,1,2-Trichloroethane (79-00-5)	0.005

Trichloroethylene (79-01-6)	0.005
Vinyl chloride (75-01-4)	0.002
Xylenes (1330-20-7)	10

**Pesticides and Synthetic Organic Chemicals
(SOC's)**

	Concentration (mg/L)
Alachlor (15972-60-8)	0.002
Atrazine (1912-24-9)	0.003
Benzo(a)pyrene (50-32-8)	0.0002
Carbofuran (1563-66-2)	0.04
Chlordane (57-74-9)	0.002
Dalapon (75-99-0)	0.2
1,2-Dibromo-3-chloropropane (96-12-8)	0.0002
2,4-D (94-75-7)	0.07
Di(2-ethylhexyl)adipate (103-23-1)	0.4
Dinoseb (88-85-7)	0.007
Diquat (85-00-7)	0.02
Endothall (145-73-3)	0.1
Endrin (72-20-8)	0.002
Ethylene dibromide (106-93-4)	0.00005
Glyphosate (1071-53-6)	0.7
Heptachlor (76-44-8)	0.0004
Heptachlor epoxide (1024-57-3)	0.0002
Hexachlorobenzene (118-74-4)	0.001
Hexachlorocyclopentadiene (77-47-4)	0.05
Lindane (58-89-9)	0.0002
Methoxychlor (72-43-5)	0.04
Oxamyl (23135-22-0)	0.2
Pentachlorophenol (87-86-5)	0.001
PCB's (as decachlorobiphenyl) (1336-36-3)	0.0005
Picloram (1918-02-1)	0.5
Simazine (122-34-9)	0.004
2,3,7,8-TCDD (Dioxin) (1746-01-6)	3X10-8
Toxaphene (8001-35-2)	0.003
2,4,5-TP (Silvex) (93-72-1)	0.05

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