CHAPTER 62-302
SURFACE WATER QUALITY STANDARDS

62-302.400 Classification of Surface Waters, Usage, Reclassification, Classified Waters.

(1) All surface waters of the State have been classified according to designated uses as follows:

CLASS I	Potable Water Supplies
CLASS I-Treated	Treated Potable Water Supplies
CLASS II	Shellfish Propagation or Harvesting
CLASS III	Fish Consumption; Recreation, Propagation and Maintenance of a Healthy, Well-Balanced Population of Fish and Wildlife
CLASS III-Limited	Fish Consumption; Recreation or Limited Recreation; and/or Propagation and Limited Maintenance of a Limited Population of Fish and Wildlife
CLASS IV	Agricultural Water Supplies
CLASS V	Navigation, Utility and Industrial Use

(2) through (4) No change.

(5) In addition to meeting applicable water quality criteria in Chapter 62-302, F.A.C., Class I-Treated Potable Water Supplies (Class I-Treated) waters shall also meet the requirements for discharged substances in paragraph 403.061(29)(b), F.S. Interested parties may provide the Department with documentation demonstrating that a Class I-Treated water would not attain the requirements of paragraph 403.061(29)(b), F.S., in accordance with Rule 62-620.555, F.A.C.

(5) through (15) renumbered as (6) through (16) No change.

(17) ~~(16)~~ Exceptions to Class III:

(a) No change.

(b) The following listed waterbodies are classified as Class I, Class I-Treated, Class II, Class III-Limited, or Class V. Copies of the maps referenced below may be obtained by writing to the Florida Department of environmental Protection, Water Quality Standards Program, 2600 Blair Stone Road, MS #6511, Tallahassee, FL 32399-2400. The written waterbody descriptions are to be read in conjunction with the incorporated maps; however, the maps will take precedence if any conflict is identified between the written descriptions and the maps.

1. through 10. No change.

11. Collier County.

Class I-Treated

Marco Lakes, as shown on the map titled "Class I waters in Collier County, June 2016," (http://www.flrules.org/Gateway/reference.asp?No=Ref-07077) which is incorporated by reference herein.

Class II

Cocohatchee River.
Connecting Waterways – From Wiggins Pass south to Outer Doctors Bay.
Dollar Bay.
Inner and Outer Clam Bay.
Inner and Outer Doctors Bay.
Little Hickory Bay.
Tidal Bays and Passes – Naples Bay and south and easterly through Rookery Bay and the Ten Thousand Islands to the Monroe County Line.
Wiggins Pass.

12. through 13. No change.

14. DeSoto County.

Class I

Horse Creek – From the northern border of Section 14, Township 38 South, Range 23 East, southward to Peace River, as shown on the map titled "Class I waters in DeSoto County, June 2016," (http://www.flrules.org/Gateway/reference.asp?No=Ref-07078) which is incorporated by reference herein.
Prairie Creek – From the h~~H~~eadwaters of Prairie Creek to the Charlotte County l~~L~~ine, as shown on the map titled

"Class I waters in DeSoto County, June 2016," which is incorporated by reference herein.

Class I-Treated

Peace River Segment – From the confluence with Horse Creek southward to the southern line of Section 15, Township 39 South, Range 23 East, as shown on the map titled "Class I waters in DeSoto County, June 2016," (http://www.flrules.org/Gateway/reference.asp?No=Ref-07078) which is incorporated by reference herein.

15. through 22. No change.

23. Gulf County.

Class I-Treated

Port St. Joe Canal, as shown on the map titled "Class I waters in Gulf County, June 2016," (http://www.flrules.org/Gateway/reference.asp?No=Ref-07079) which is incorporated by reference herein.

Class II

Indian Lagoon – West of Indian Pass and St. Vincent Sound.

St. Joseph Bay – South of a line from St. Joseph Point due east, excluding an area that is both within an arc 2.9 miles from the center of the mouth of Gulf County Canal and east of a line from St. Joseph Point to the northwest corner of Ssection 13, Township 8 South, Range 11 West.

24. through 25. No change.

26. Hendry County.

Class I

Lake Okeechobee, as shown on the map titled "Class I waters in Hendry County, June 2016," (http://www.flrules.org/Gateway/reference.asp?No=Ref-07080) which is incorporated by reference herein.

Class I-Treated

Caloosahatchee River Segment - From State Road 29 (Bridge Street) westward to the Lee County line, as shown on the map titled "Class I waters in Hendry County, June 2016," (http://www.flrules.org/Gateway/reference.asp?No=Ref-07080) which is incorporated by reference herein.

27. through 28. No change.

29. Hillsborough County.

Class I

Cow House Creek – Hillsborough River to source, as shown on the map titled "Class I waters in Hillsborough County, June 2016," (http://www.flrules.org/Gateway/reference.asp?No=Ref-07081) which is incorporated by reference herein.

Hillsborough River – City of Tampa Water Treatment Plant Dam to Flint Creek, as shown on the map titled "Class I waters in Hillsborough County, June 2016," (http://www.flrules.org/Gateway/reference.asp?No=Ref-07081) which is incorporated by reference herein.

Class I-Treated

Alafia River Segment - From Lithia Pinecrest Road (County Road 640) westward to Bell Shoals Road, as shown on the map titled "Class I waters in Hillsborough County, June 2016," (http://www.flrules.org/Gateway/reference.asp?No=Ref-07081) which is incorporated by reference herein.

Tampa By-Pass Canal Segment - From the control structure S-163 at Cow House Creek to the control structure S-160 (north of State Road 60), and Harney Canal west to Harney Road, as shown on the map titled "Class I waters in Hillsborough County, June 2016," (http://www.flrules.org/Gateway/reference.asp?No=Ref-07081) which is incorporated by reference herein.

Class II

All or portions of Tampa Bay, Old Tampa Bay, and Mobbly Bay, excluding waters in the Tampa Harbor Channel and waters north of SR 580 in Rocky and Double Branch Creeks, as shown on the map titled "Class II waters in Hillsborough County, November 2015," (http://www.flrules.org/Gateway/reference.asp?No=Ref-06394) which is incorporated by reference herein.

30. through 47. No change.

48. Orange County ~~– none~~.

Class I-Treated

Taylor Creek Reservoir, as shown on the map titled "Class I Waters in Orange and Osceola Counties, June 2016," (http://www.flrules.org/Gateway/reference.asp?No=Ref-07082) which is incorporated by reference herein.

49. Osceola County ~~– none~~

Class I-Treated

Taylor Creek Reservoir, as shown on the map titled "Class I Waters in Orange and Osceola Counties, June 2016," (http://www.flrules.org/Gateway/reference.asp?No=Ref-07082) which is incorporated by reference herein.

50. through 67. No change.

Rulemaking Authority 403.061, 403.062, 403.087, 403.088, 403.504, 403.704, 403.804 FS. Law Implemented 403.021(11), 403.061, 403.087, 403.088, 403.141, 403.161, 403.182, 403.502, 403.504, 403.702, 403.708 FS. History–Formerly 28-5.06, 17-3.06, Amended and Renumbered 3-1-79, Amended 1-1-83, 2-1-83, Formerly 17-3.081, Amended 4-25-93, Formerly 17-302.400, Amended 12-26-96, 8-24-00, 12-7-06, 8-5-10, 8-1-13, 2-17-16, ____.

62-302.530 Table: Surface Water Quality Criteria.

The following table contains both numeric and narrative surface water quality criteria to be applied except within zones of mixing. The left-hand column of the Table is a list of constituents for which a surface water criterion exists. The headings for the water quality classifications are found at the top of the Table, and the classification descriptions for the headings are specified in subsection 62-302.400(1), F.A.C. Applicable criteria lie within the Table. The individual criteria should be read in conjunction with other provisions in water quality standards, including Rule 62-302.500, F.A.C. The criteria contained in Rule 62-302.500, F.A.C., also apply to all waters unless alternative or more stringent criteria are specified in Rule 62-302.530, F.A.C. Unless otherwise stated, all criteria express the maximum not to be exceeded at any time except within established mixing zones or in accordance with site-specific effluent limitations developed pursuant to Rule 62-620.620, F.A.C. In some cases, there are separate or additional limits, which apply independently of the maximum not to be exceeded at any time. For example, the human health-based criteria that ~~for carcinogens, which~~ are expressed as an annual average (denoted as "annual avg." in the Table)~~,~~ are applied as the maximum allowable annual average concentration at the long-term harmonic mean flow (see subsection 62-302.200(2), F.A.C.). Numeric interpretations of the narrative nutrient criterion in paragraph 62-302.530(47)(b), F.A.C., shall be expressed as spatial averages and applied over a spatial area consistent with their derivation. In applying the water quality standards, the Department shall take into account the variability occurring in nature and shall recognize the statistical variability inherent in sampling and testing procedures. The Department's assessment methodology, set forth in Chapter 62-303, F.A.C., accounts for such natural and statistical variability when used to assess ambient waters pursuant to sections 305(b) and 303(d) of the Federal Clean Water Act.

~~Criteria for Surface Water Quality Classifications~~								
		Class I			Class III and Class III-Limited (see Note 4)			
Parameter	Units	Class I	Class I-Treated	Class II	Predominantly Fresh Waters	Predominantly Marine Waters	Class IV	Class V
(1) Acenaphthene	Micrograms/L	≤ 110 annual avg.	≤ 110 annual avg.	≤ 130 annual avg.	≤ 130 annual avg.	≤ 130 annual avg.		
(2) Acrolein	Micrograms/L	≤ 3 annual avg.	≤ 3 annual avg.	≤ 300 annual avg.	≤ 300 annual avg.	≤ 300 annual avg.		
(3) Acrylonitrile	Micrograms/L	≤ 0.13 annual avg.	≤ 0.13 annual avg.	≤ 11 annual avg.	≤ 11 annual avg.	≤ 11 annual avg.		
(4) Aldrin	Micrograms/L	≤ 0.0000038 annual avg.; ≤ 3.0 max	≤ 0.0000038 annual avg.; ≤ 3.0 max	≤ 0.0000038 annual avg.; ≤ 1.3 max	≤ 0.0000038 annual avg.; ≤ 3.0 max	≤ 0.0000038 annual avg.; ≤ 1.3 max		
(5) ~~(1)~~ Alkalinity	Milligrams/L as $CaCO_3$	Shall not be depressed below 20. In waterbodies with natural alkalinity levels below 20 mg/L, alkalinity shall not be reduced by more than 25%.	Shall not be depressed below 20. In waterbodies with natural alkalinity levels below 20 mg/L, alkalinity shall not be reduced by more than 25%.		Shall not be depressed below 20. In waterbodies with natural alkalinity levels below 20 mg/L, alkalinity shall not be reduced by more than 25%.		≤ 600	
(6) ~~(2)~~ Aluminum	Milligrams/L			≤ 1.5		≤ 1.5		
(7) ~~(3)~~ Ammonia (Total Ammonia Nitrogen) (Class I, Class I-Treated, Class III fresh water, and Class III-Limited fresh water)	Milligrams/L as Total Ammonia Nitrogen (TAN = $NH_4^+ + NH_3$)	The 30-day average TAN value shall not exceed the average of the values calculated from the following equation, with no single value exceeding 2.5 times the value from the equation: $30-\text{day Average} = 0.8876 \times \left(\frac{0.0278}{1+10^{7.688-pH}} + \frac{1.1994}{1+10^{pH-7.688}}\right) \times \left(2.126 \times 10^{0.028\times(20-MAX(T,7))}\right)$ *T* and *pH* are defined as the paired temperature (°C) and pH associated with the TAN sample. For purposes of total ammonia nitrogen criterion calculations, pH is subject to the range of 6.5 to 9.0. The pH shall be set at 6.5 if measured pH is < 6.5 and set at 9.0 if the measured pH is > 9.0.							
(8) Anthracene	Micrograms/L	≤ 460 annual avg.	≤ 460 annual avg.	≤ 540 annual avg.	≤ 540 annual avg.	≤ 540 annual avg.		
(9) ~~(4)~~ Antimony	Micrograms/L	≤ 2.4 annual avg. ~~14.0~~	≤ 2.4 annual avg.	≤ 240 annual avg. ~~4,300~~	≤ 240 annual avg. ~~4,300~~	≤ 240 annual avg. ~~4,300~~		
(10) ~~(5)~~ (a) Arsenic (total)	Micrograms/L	≤ 10	≤ 10	≤ 50	≤ 50	≤ 50	≤ 50	≤ 50
(10) ~~(5)~~ (b) Arsenic (trivalent)	Micrograms/L measured as total recoverable Arsenic			≤ 36		≤ 36		
(11) ~~(6)~~ (a) Bacteriological Quality (Fecal Coliform Bacteria) (Class II Waters)	Number per 100 ml (Most Probable Number (MPN) or Membrane Filter (MF))	MPN or MF counts shall not exceed a median value of 14 with not more than 10% of the samples exceeding 43 (for MPN) or 31 (for MF), nor exceed 800 on any one day. To determine the percentage of samples exceeding the criteria when there are both MPN and MF samples for a waterbody, the percent shall be calculated as $100*(n_{mpn}+n_{mf})/N$, where n_{mpn} is the number of MPN samples greater than 43, n_{mf} is the number of MF samples greater than 31, and N is the total number of MPN and MF samples.						

~~Criteria for Surface Water Quality Classifications~~								
		Class I			Class III and Class III-Limited (see Note 4)			
Parameter	Units	Class I	Class I-Treated	Class II	Predominantly Fresh Waters	Predominantly Marine Waters	Class IV	Class V
(11) ~~(6)~~ (b) Bacteriological Quality **(***Escherichia coli* Bacteria) (Class I and Class I-Treated Waters)	Number per 100 ml (Most Probable Number (MPN) or Membrane Filter (MF))	MPN or MF counts shall not exceed a monthly geometric mean of 126 nor exceed the Ten Percent Threshold Value (TPTV) of 410 in 10% or more of the samples during any 30-day period. Monthly geometric means shall be based on a minimum of 5 samples taken over a 30-day period.						
(11) (c) Bacteriological Quality **(***Escherichia coli* Bacteria) (Class III Predominantly Fresh Waters)	Number per 100 ml (Most Probable Number (MPN) or Membrane Filter (MF))	MPN or MF counts shall not exceed a monthly geometric mean of 126 nor exceed the Ten Percent Threshold Value (TPTV) of 410 in 10% or more of the samples during any 30-day period. Monthly geometric means shall be based on a minimum of 10 samples taken over a 30-day period.						
(11) (d) ~~(6) (c)~~ Bacteriological Quality (*Enterococci* Bacteria) (Class III Predominantly Marine Waters)	Number per 100 ml (Most Probable Number (MPN) or Membrane Filter (MF))	MPN or MF counts shall not exceed a monthly geometric mean of 35 nor exceed the Ten Percent Threshold Value (TPTV) of 130 in 10% or more of the samples during any 30-day period. Monthly geometric means shall be based on a minimum of 10 samples taken over a 30-day period.						
(12) ~~(7)~~ Barium	Milligrams/L	≤ 1	≤ 1					
(13) ~~(8)~~ Benzene	Micrograms/L	≤ 2.0 annual avg. ~~1.18~~	≤ 2.0 annual avg.	≤ 53 annual avg. ~~71.28 annual avg.~~	≤ 53 annual avg. ~~71.28 annual avg.~~	≤ 53 annual avg. ~~71.28 annual avg.~~		
(14) Benzidine	Micrograms/L	≤ 0.00031 annual avg.	≤ 0.00031 annual avg.	≤ 0.020 annual avg.	≤ 0.020 annual avg.	≤ 0.020 annual avg.		
(15) Benzo(a)-anthracene	Micrograms/L	≤ 0.012000 annual avg.	≤ 0.012000 annual avg.	≤ 0.014000 annual avg.	≤ 0.014000 annual avg.	≤ 0.014000 annual avg.		
(16) Benzo(a)pyrene	Micrograms/L	≤ 0.001200 annual avg.	≤ 0.001200 annual avg.	≤ 0.001400 annual avg.	≤ 0.001400 annual avg.	≤ 0.001400 annual avg.		
(17) Benzo(b)-fluoranthene	Micrograms/L	≤ 0.012000 annual avg.	≤ 0.012000 annual avg.	≤ 0.014000 annual avg.	≤ 0.014000 annual avg.	≤ 0.014000 annual avg.		
(18) Benzo(k)-fluoranthene	Micrograms/L	≤ 0.12 annual avg.	≤ 0.12 annual avg.	≤ 0.140 annual avg.	≤ 0.140 annual avg.	≤ 0.140 annual avg.		
(19) ~~(9)~~ Beryllium	Micrograms/L	≤ 11 annual avg. ~~0.0077 annual avg.~~	≤ 11 annual avg.	≤ 64 annual avg. ~~0.13 annual avg.~~	≤ 64 annual avg. ~~0.13 annual avg.~~	≤ 64 annual avg. ~~0.13 annual avg.~~	≤ 100 in waters with a hardness in mg/L of $CaCO_3$ of less than 250 and shall not exceed 500 in harder waters	
(20) beta-Hexachloro-cyclohexane (b-BHC)	Micrograms/L	≤ 0.018 annual avg.	≤ 0.018 annual avg.	≤ 0.033 annual avg.	≤ 0.033 annual avg.	≤ 0.033 annual avg.		

~~Criteria for Surface Water Quality Classifications~~								
		Class I			Class III and Class III-Limited (see Note 4)			
Parameter	Units	Class I	Class I-Treated	Class II	Predominantly Fresh Waters	Predominantly Marine Waters	Class IV	Class V
(21) ~~(10)~~ (a) Biological Health (Shannon-Weaver Diversity Index using Hester-Dendy type samplers) (Class I Waters, Class I-Treated Waters, and Class III Predominantly Fresh Waters)	Per cent reduction of Shannon-Weaver Diversity Index	The Index for benthic macroinvertebrates shall not be reduced to less than 75% of background levels as measured using organisms retained by a U. S. Standard No. 30 sieve and collected and composited from a minimum of three Hester-Dendy type artificial substrate samplers of 0.10 to 0.15 m^2 area each, incubated for a period of four weeks.						
(21) ~~(10)~~ (b) Biological Health (Shannon-Weaver Diversity Index using Ekman or Ponar type samplers)	Per cent reduction of Shannon-Weaver Diversity Index	1. Class I, Class I-Treated, and Class III Predominantly Fresh Waters: In lakes, the Index for benthic macroinvertebrates shall not be reduced to less than 75% of established background levels as measured using organisms retained by a U.S. Standard No. 30 sieve and collected and composited from a minimum of three natural substrate samples, taken with Ekman or Ponar type samplers with minimum sampling area of 225 cm^2.						
		2. Class II and Class III Predominantly Marine Waters: The Index for benthic macroinvertebrates shall not be reduced to less than 75% of established background levels as measured using organisms retained by a U.S. Standard No. 30 sieve and collected and composited from a minimum of three natural substrate samples, taken with Ponar type samplers with minimum sampling area of 225 cm^2.						
(22) Bis (2-Chloroethyl) Ether	Micrograms/L	≤ 0.066 annual avg.	≤ 0.066 annual avg.	≤ 4.1 annual avg.	≤ 4.1 annual avg.	≤ 4.1 annual avg.		
(23) Bis (2-Chloro-1-Methylethyl) Ether	Micrograms/L	≤ 240 annual avg.	≤ 240 annual avg.	≤ 4000 annual avg.	≤ 4000 annual avg.	≤ 4000 annual avg.		
(24) Bis (2-Ethyl-hexyl) Phthalate	Micrograms/L	≤ 1.5 annual avg.	≤ 1.5 annual avg.	≤ 2.1 annual avg.	≤ 2.1 annual avg.	≤ 2.1 annual avg.		
(25) ~~(11)~~ BOD (Biochemical Oxygen Demand)		Shall not be increased to exceed values which would cause dissolved oxygen to be depressed below the limit established for each class and, in no case, shall it be great enough to produce nuisance conditions.						
(26) ~~(12)~~ Boron	Milligrams/L						≤ 0.75	
(27) ~~(13)~~ Bromates	Milligrams/L			≤ 100		≤ 100		
(28) ~~(14)~~ Bromine (free molecular)	Milligrams/L			≤ 0.1		≤ 0.1		
(29) Bromoform	Micrograms/L	≤ 15 annual avg.	≤ 15 annual avg.	≤ 260 annual avg.	≤ 260 annual avg.	≤ 260 annual avg.		
(30) Butylbenzyl Phthalate	Micrograms/L	≤ 0.29 annual avg.	≤ 0.29 annual avg.	≤ 0.29 annual avg.	≤ 0.29 annual avg.	≤ 0.29 annual avg.		
(31) ~~(15)~~ Cadmium	Micrograms/L See Notes (1) and (3).	Cd ≤ $e^{(0.7409[lnH]-4.719)}$;	Cd ≤ $e^{(0.7409[lnH]-4.719)}$	≤ 8.8	Cd ≤ $e^{(0.7409[lnH]-4.719)}$;	≤ 8.8		
(32) Carbaryl	Micrograms/L	≤ 2.1	≤ 2.1		≤ 2.1			
(33) ~~(16)~~ Carbon tetrachloride	Micrograms/L	≤ 0.95 ~~0.25~~ annual avg.; ~~3.0 max~~	≤ 0.95 annual avg.	≤ 10 ~~4.42~~ annual avg.	≤ 10 ~~4.42~~ annual avg.	≤ 10 ~~4.42~~ annual avg.		
(34) Chlordane	Micrograms/L	≤ 0.0010 annual avg.; ≤ 0.0043 max	≤ 0.0010 annual avg.; ≤ 0.0043 max	≤ 0.0010 annual avg.; ≤ 0.004 max	≤ 0.0010 annual avg.; ≤ 0.0043 max	≤ 0.0010 annual avg.; ≤ 0.004 max		

~~Criteria for Surface Water Quality Classifications~~								
		Class I			Class III and Class III-Limited (see Note 4)			
Parameter	Units	Class I	Class I-Treated	Class II	Predominantly Fresh Waters	Predominantly Marine Waters	Class IV	Class V
(35) ~~(17)~~ Chlorides	Milligrams/L	≤ 250		Not increased more than 10% above normal background. Normal daily and seasonal fluctuations shall be maintained.		Not increased more than 10% above normal background. Normal daily and seasonal fluctuations shall be maintained.		In predominant-ly marine waters, not increased more than 10% above normal background. Normal daily and seasonal fluctuations shall be maintained.
(36) ~~(18)~~ Chlorine (total residual)	Milligrams/L	≤ 0.01	≤ 0.01	≤ 0.01	≤ 0.01	≤ 0.01		
(37) Chlorobenzene	Micrograms/L	≤ 110 annual avg.	≤ 110 annual avg.	≤ 970 annual avg.	≤ 970 annual avg.	≤ 970 annual avg.		
(38) Chlorodibromo-methane	Micrgrams/L	≤ 1.8 annual avg.	≤ 1.8 annual avg.	≤ 44 annual avg.	≤ 44 annual avg.	≤ 44 annual avg.		
(39) Chloroform	Micrograms/L	≤ 60 annual avg.	≤ 60 annual avg.	≤ 2300 annual avg.	≤ 2300 annual avg.	≤ 2300 annual avg.		
(40) Chlorophenoxy Herbicide (2,4,5-TP) [Silvex]	Micrograms/L	≤ 160 annual avg.	≤ 160 annual avg.	≤ 570 annual avg.	≤ 570 annual avg.	≤ 570 annual avg.		
(41) Chlorophenoxy Herbicide (2,4-D)	Micrograms/L	≤ 1200 annual avg.	≤ 1200 annual avg.	≤ 13000 annual avg.	≤ 13000 annual avg.	≤ 13000 annual avg.		
(42) Chlorpyrifos	Micrograms/L	≤ 0.041	≤ 0.041	≤ 0.0056	≤ 0.041	≤ 0.0056		
(43) ~~(19)~~ (a) Chromium (trivalent)	Micrograms/L measured as total recoverable Chromium See Notes (1) and (3).	Cr (III) ≤ $e^{(0.819[\ln H]+0.6848)}$	Cr (III) ≤ $e^{(0.819[\ln H]+0.6848)}$		Cr (III) ≤ $e^{(0.819[\ln H]+0.6848)}$		Cr (III) ≤ $e^{(0.819[\ln H]+0.6848)}$	In predominantly fresh waters, ≤ $e^{(0.819[\ln H]+0.6848)}$
(43) ~~(19)~~ (b) Chromium (hexavalent)	Micrograms/L See Note (3)	≤ 11	≤ 11	≤ 50	≤ 11	≤ 50	≤ 11	In predominantly fresh waters, ≤ 11. In predominantly marine waters, ≤ 50

~~Criteria for Surface Water Quality Classifications~~								
Parameter	Units	Class I		Class II	Class III and Class III-Limited (see Note 4)		Class IV	Class V
		Class I	Class I-Treated		Predominantly Fresh Waters	Predominantly Marine Waters		
~~(20) Chronic Toxicity (see definition in subsection 62-302.200(5), F.A.C. and also see below, "Substances in concentrations which...")~~								
(44) Chrysene	Micrograms/L	≤ 1.2 annual avg.	≤ 1.2 annual avg.	≤ 1.4 annual avg.	≤ 1.4 annual avg.	≤ 1.4 annual avg.		
(45) ~~(21)~~ Color, etc. ~~(see also Minimum Criteria, Odor, Phenols, etc.)~~	Class IV Waters: Color, odor, and taste producing substances and other deleterious substances, including other chemical compounds attributable to domestic wastes, industrial wastes, and other wastes: Only such amounts as will not render the waters unsuitable for agricultural irrigation, livestock watering, industrial cooling, industrial process water supply purposes, or fish survival.							
(46) ~~(22)~~ Conductance, Specific	Micromhos/cm	Shall not be increased more than 50% above background or to 1275, whichever is greater.	Shall not be increased more than 50% above background or to 1275, whichever is greater.		Shall not be increased more than 50% above background or to 1275, whichever is greater.		Shall not be increased more than 50% above background or to 1275, whichever is greater.	Shall not exceed 4,000
(47) ~~(23)~~ Copper	Micrograms/L See Notes (1) and (3).	Cu ≤ $e^{(0.8545[\ln H]-1.702)}$	Cu ≤ $e^{(0.8545[\ln H]-1.702)}$	≤ 3.7	Cu ≤ $e^{(0.8545[\ln H]-1.702)}$	≤ 3.7	≤ 500	≤ 500
(48) ~~(24)~~ Cyanide	Micrograms/L	≤ 3.7 annual avg.; ≤ 5.2 max	≤ 3.7 annual avg.; ≤ 5.2 max	≤ 1.0 max	≤ 5.2 max	≤ 1.0 max	≤ 5.0 max	≤ 5.0 max
~~(25) Definitions (see Section 62-302.200, F.A.C.)~~								
(49) Demeton	Micrograms/L	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1		
(50) ~~(26)~~ Detergents	Milligrams/L	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5	≤ 0.5
(51) Diazinon	Micrograms/L	≤ 0.17	≤ 0.17	≤ 0.82	≤ 0.17	≤ 0.82		
(52) Dibenzo(a,h)-anthracene	Micrograms/L	≤ 0.001200 annual avg.	≤ 0.001200 annual avg.	≤ 0.001400 annual avg.	≤ 0.001400 annual avg.	≤ 0.001400 annual avg.		
(53) Dichlorobromo-methane (Bromo-dichloromethane)	Micrograms/L	≤ 2.1 annual avg.	≤ 2.1 annual avg.	≤ 57 annual avg.	≤ 57 annual avg.	≤ 57 annual avg.		
~~(27) 1,1-Dichloroethylene (1,1-dichloroethene)~~	~~Micrograms/L~~	~~≤ 0.057 annual avg.; ≤ 7.0 max~~		~~≤ 3.2 annual avg.~~	~~≤ 3.2 annual avg.~~	~~≤ 3.2 annual avg.~~		
~~(28) Dichloromethane (methylene chloride)~~	~~Micrograms/L~~	~~≤ 4.65 annual avg.~~		~~≤ 1,580 annual avg.~~	~~≤ 1,580 annual avg.~~	~~≤ 1,580 annual avg.~~		
(54) Dieldrin	Micrograms/L	≤ 0.0000054 annual avg.; ≤ 0.0019 max	≤ 0.0000054 annual avg.; ≤ 0.0019 max	≤ 0.0000054 annual avg.; ≤ 0.0019 max	≤ 0.0000054 annual avg.; ≤ 0.0019 max	≤ 0.0000054 annual avg.; ≤ 0.0019 max		
(55) Diethyl Phthalate	Micrograms/L	≤ 770 annual avg.	≤ 770 annual avg.	≤ 840 annual avg.	≤ 840 annual avg.	≤ 840 annual avg.		
(56) Dimethyl Phthalate	Micrograms/L	≤ 2400 annual avg.	≤ 2400 annual avg.	≤ 2400 annual avg.	≤ 2400 annual avg.	≤ 2400 annual avg.		

~~Criteria for Surface Water Quality Classifications~~								
Parameter	Units	Class I		Class II	Class III and Class III-Limited (see Note 4)		Class IV	Class V
		Class I	Class I-Treated		Predominantly Fresh Waters	Predominantly Marine Waters		
(57) Di-n-Butyl Phthalate	Micrograms/L	≤ 35 annual avg.	≤ 35 annual avg.	≤ 36 annual avg.	≤ 36 annual avg.	≤ 36 annual avg.		
~~(29) 2,4-Dinitrotoluene~~	~~Micrograms/L~~	~~≤ 0.11 annual avg.~~		~~≤ 9.1 annual avg.~~	~~≤ 9.1 annual avg.~~	~~≤ 9.1 annual avg.~~		
(58) (a) Dissolved Oxygen (Class I Waters, Class I-Treated Waters, Class II Waters, Class III, Class III-Limited Waters)	Milligrams/L	See Rule 62-302.533, F.A.C.						
(58) (b) Dissolved Oxygen (Class IV Waters)	Milligrams/L	Shall not average less than 4.0 in a 24-hour period and shall never be less than 3.0.						
(58) (c) Dissolved Oxygen (Class V Waters)	Milligrams/L	Shall not be less than 0.3, fifty percent of the time on an annual basis for flows greater than or equal to 250 cubic feet per second and shall never be less than 0.1. Normal daily and seasonal fluctuations above these levels shall be maintained.						
~~(30) Dissolved Oxygen~~	~~Milligrams/L~~	~~See Rule 62-302.533, F.A.C.~~					~~Shall not average less than 4.0 in a 24-hour period and shall never be less than 3.0.~~	~~Shall not be less than 0.3, fifty percent of the time on an annual basis for flows greater than or equal to 250 cubic feet per second and shall never be less than 0.1. Normal daily and seasonal fluctuations above these levels shall be maintained.~~
(59) ~~(31)~~ Dissolved Solids	Milligrams/L	≤ 500 as a monthly avg.; ≤ 1,000 max						
(60) Endosulfan	Micrograms/L	≤ 0.056	≤ 0.056	≤ 0.0087	≤ 0.056	≤ 0.0087		
(61) Endrin	Micrograms/L	≤ 0.0023	≤ 0.0023	≤ 0.0023	≤ 0.0023	≤ 0.0023		
(62) Ethylbenzene	Micrograms/L	≤ 80 annual avg.	≤ 80 annual avg.	≤ 140 annual avg.	≤ 140 annual avg.	≤ 140 annual avg.		
(63) Fluoranthene	Micrograms/L	≤ 18 annual avg.	≤ 18 annual avg.	≤ 19 annual avg.	≤ 19 annual avg.	≤ 19 annual avg.		
(64) Fluorene	Micrograms/L	≤ 77 annual avg.	≤ 77 annual avg.	≤ 94 annual avg.	≤ 94 annual avg.	≤ 94 annual avg.		
(65) ~~(32)~~ Fluorides	Milligrams/L	≤ 1.5	≤ 10.0	≤ 1.5	≤ 10.0	≤ 5.0	≤ 10.0	≤ 10.0

~~Criteria for Surface Water Quality Classifications~~								
Parameter	Units	Class I		Class II	Class III and Class III-Limited (see Note 4)		Class IV	Class V
		Class I	Class I-Treated		Predominantly Fresh Waters	Predominantly Marine Waters		
~~(33) "Free Froms" (see Minimum Criteria in Rule 62-302.500, F.A.C.)~~								
~~(34) "General Criteria" (see Rule 62-302.500, F.A.C. and individual criteria)~~								
~~(35)(a) Halomethanes (Total trihalomethanes) (total of bromoform, chlorodibromo-methane, dichlorobromome-thane, and chloroform). Individual halomethanes shall not exceed (b)1. to (b)5. below.~~	~~Micrograms/L~~	~~≤ 80~~						
~~(35)(b)1. Halomethanes (individual): Bromoform~~	~~Micrograms/L~~	~~≤ 4.3 annual avg.~~		~~≤ 360 annual avg.~~	~~≤ 360 annual avg.~~	~~≤ 360 annual avg.~~		
~~(35)(b)2. Halomethanes (individual): Chlorodibromo-methane~~	~~Micrograms/L~~	~~≤ 0.41 annual avg.~~		~~≤ 34 annual avg.~~	~~≤ 34 annual avg.~~	~~≤ 34 annual avg.~~		
~~(35)(b)3. Halomethanes (individual): Chloroform~~	~~Micrograms/L~~	~~≤ 5.67 annual avg.~~		~~≤ 470.8 annual avg.~~	~~≤ 470.8 annual avg.~~	~~≤ 470.8 annual avg.~~		
~~(35)(b)4. Halomethanes (individual): Chloromethane (methyl chloride)~~	~~Micrograms/L~~	~~≤ 5.67 annual avg.~~		~~≤ 470.8 annual avg.~~	~~≤ 470.8 annual avg.~~	~~≤ 470.8 annual avg.~~		
~~(35)(b)5. Halomethanes (individual): Dichlorobromo-methane~~	~~Micrograms/L~~	~~≤ 0.27 annual avg.~~		~~≤ 22 annual avg.~~	~~≤ 22 annual avg.~~	~~≤ 22 annual avg.~~		
(66) Guthion	Micrograms/L	≤ 0.01	≤ 0.01	≤ 0.01	≤ 0.01	≤ 0.01		
(67) Heptachlor	Micrograms/L	≤ 0.000025 annual avg.; ≤ 0.0038 max	≤ 0.000025 annual avg.; ≤ 0.0038 max	≤ 0.000025 annual avg.; ≤ 0.0036 max	≤ 0.000025 annual avg.; ≤ 0.0038 max	≤ 0.000025 annual avg.; ≤ 0.0036 max		
(68) Heptachlor Epoxide	Micrograms/L	≤ 0.000098 annual avg.	≤ 0.000098 annual avg.	≤ 0.000099 annual avg.	≤ 0.000099 annual avg.	≤ 0.000099 annual avg.		
(69) ~~(36)~~ Hexachlorobutadiene	Micrograms/L	≤ 0.018 ~~0.45~~ annual avg.	≤ 0.018 annual avg.	≤ 0.018 ~~49.7~~ annual avg.	≤ 0.018 ~~49.7~~ annual avg.	≤ 0.018 ~~49.7~~ annual avg.		

~~Criteria for Surface Water Quality Classifications~~								
Parameter	Units	Class I		Class II	Class III and Class III-Limited (see Note 4)		Class IV	Class V
		Class I	Class I-Treated		Predominantly Fresh Waters	Predominantly Marine Waters		
(70) Hexachloro-cyclopentadiene	Micrograms/L	≤ 4.7 annual avg.	≤ 4.7 annual avg.	≤ 5 annual avg.	≤ 5 annual avg.	≤ 5 annual avg.		
(71) Hexachloro-ethane	Micrograms/L	≤ 0.24 annual avg.	≤ 0.24 annual avg.	≤ 0.27 annual avg.	≤ 0.27 annual avg.	≤ 0.27 annual avg.		
~~(37) Imbalance (see Nutrients)~~								
(72) Indeno(1,2,3-cd)-pyrene	Micrograms/L	≤ 0.012000 annual avg.	≤ 0.012000 annual avg.	≤ 0.014000 annual avg.	≤ 0.014000 annual avg.	≤ 0.014000 annual avg.		
(73) Isophorone	Micrograms/L	≤ 76 annual avg.	≤ 76 annual avg.	≤ 3600 annual avg.	≤ 3600 annual avg.	≤ 3600 annual avg.		
(74) ~~(38)~~ Iron	Milligrams/L	≤ 1.0	≤ 1.0	≤ 0.3	≤ 1.0	≤ 0.3	≤ 1.0	
(75) ~~(39)~~ Lead	Micrograms/L See Notes (1) and (3).	$Pb \leq e^{(1.273[\ln H]-4.705)}$;	$Pb \leq e^{(1.273[\ln H]-4.705)}$	≤ 8.5	$Pb \leq e^{(1.273[\ln H]-4.705)}$;	≤ 8.5	≤ 50	≤ 50
(76) Lindane (g-benzene hexachloride)	Micrograms/L	Class I Waters, Class I-Treated Waters, Class II Waters, Class III, Class III-Limited Waters: See Minimum Criteria in paragraph 62-302.500(1)(d), F.A.C.						
(77) Malathion	Micrograms/L	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1	≤ 0.1		
(78) ~~(40)~~ Manganese	Milligrams/L			≤ 0.1				
(79) ~~(41)~~ Mercury	Micrograms/L	≤ 0.012	≤ 0.012	≤ 0.025	≤ 0.012	≤ 0.025	≤ 0.2	≤ 0.2
(80) Methoxychlor	Micrograms/L	≤ 0.023 annual avg.	≤ 0.023 annual avg.	≤ 0.023 annual avg.	≤ 0.023 annual avg.	≤ 0.023 annual avg.		
(81) Methyl Bromide	Micrograms/L	≤ 120 annual avg.	≤ 120 annual avg.	≤ 10000 annual avg.	≤ 10000 annual avg.	≤ 10000 annual avg.		
(82) Methyl Chloride	Micrograms/L	≤ 5.67 annual avg.	≤ 5.67 annual avg.	≤ 470.8 annual avg.	≤ 470.8 annual avg.	≤ 470.8 annual avg.		
(83) Methylene Chloride (Dichloro-methane)	Micrograms/L	≤ 36 annual avg.	≤ 36 annual avg.	≤ 2300 annual avg.	≤ 2300 annual avg.	≤ 2300 annual avg.		
~~(42) Minimum Criteria (see Section 62-302.500, F.A.C.)~~								
(84) Mirex	Micrograms/L	≤ 0.001	≤ 0.001	≤ 0.001	≤ 0.001	≤ 0.001		
~~(43) Mixing Zones (See Section 62-4.244, F.A.C.)~~								
(85) ~~(44)~~ Nickel	Micrograms/L See Notes (1) and (3).	$Ni \leq e^{(0.846[\ln H]+0.0584)}$	$Ni \leq e^{(0.846[\ln H]+0.0584)}$	≤ 8.3	$Ni \leq e^{(0.846[\ln H]+0.0584)}$	≤ 8.3	≤ 100	
(86) ~~(45)~~ Nitrate	Milligrams/L as N	≤ 10 or that concentration that exceeds the nutrient criteria						
(87) Nitrobenzene	Micrograms/L	≤ 12 annual avg.	≤ 12 annual avg.	≤ 570 annual avg.	≤ 570 annual avg.	≤ 570 annual avg.		
(88) ~~(46)~~ Nonylphenol (4-nonylphenol)	Micrograms/L	≤ 6.6	≤ 6.6	≤ 1.7	≤ 6.6	≤ 1.7		
(89) ~~(47)~~ Nuisance Species		Substances in concentrations which result in the dominance of nuisance species: none shall be present.						

~~Criteria for Surface Water Quality Classifications~~								
		Class I			Class III and Class III-Limited (see Note 4)			
Parameter	Units	Class I	Class I-Treated	Class II	Predominantly Fresh Waters	Predominantly Marine Waters	Class IV	Class V
(90) ~~(48)~~ (a) Nutrients		The discharge of nutrients shall continue to be limited as needed to prevent violations of other standards contained in this chapter. Man-induced nutrient enrichment (total nitrogen or total phosphorus) shall be considered degradation in relation to the provisions of Rules 62-302.300, 62-302.700, and 62-4.242, F.A.C.						
(90) ~~(48)~~ (b) Nutrients		In no case shall nutrient concentrations of a body of water be altered so as to cause an imbalance in natural populations of aquatic flora or fauna.						
(91) (a) Odor (Class II Waters)	Threshold odor number	Shall not exceed 24 at 60 degrees C as a daily average.						
(91) (b) Odor (Class V Waters)	Threshold odor number	Odor producing substances: only in such amounts as will not unreasonably interfere with use of the water for the designated purpose of this classification.						
~~(49) Odor (also see Color, Minimum Criteria, Phenolic Compounds, etc.)~~	~~Threshold odor number~~			~~Shall not exceed 24 at 60 degrees C as a daily average.~~				~~Odor producing substances: only in such amounts as will not unreasonably interfere with use of the water for the designated purpose of this classification.~~
(92) ~~(50)~~ (a) Oils and Greases	Milligrams/L	Dissolved or emulsified oils and greases shall not exceed 5.0						Dissolved or emulsified oils and greases shall not exceed 10.0
(92) ~~(50)~~ (b) Oils and Greases		No undissolved oil, or visible oil defined as iridescence, shall be present so as to cause taste or odor, or otherwise interfere with the beneficial use of waters.						
~~(50) Pesticides and Herbicides~~								
~~(51)(a) 2,4,5-TP~~	~~Micrograms/L~~	~~≤ 10~~						
~~(51)(b) 2-4-D~~	~~Micrograms/L~~	~~≤ 100~~						
~~(51)(c) Aldrin~~	~~Micrograms/L~~	~~≤ .00013 annual avg.; 3.0 max~~		~~≤ 0.00014 annual avg.; 1.3 max~~	~~≤ 0.00014 annual avg.; 3.0 max~~	~~≤ 0.00014 annual avg.; 1.3 max~~		
~~(51)(d) Beta-hexachlorocyclohexane (b-BHC)~~	~~Micrograms/L~~	~~≤ 0.014 annual avg.~~		~~≤ 0.046 annual avg.~~	~~≤ 0.046 annual avg.~~	~~≤ 0.046 annual avg.~~		
~~(51)(e) Carbaryl~~	~~Micrograms/L~~	~~≤ 2.1~~			~~≤ 2.1~~			
~~(51)(f) Chlordane~~	~~Micrograms/L~~	~~≤ 0.00058 annual avg.; 0.0043 max~~		~~≤ 0.00059 annual avg.; 0.004 max~~	~~≤ 0.00059 annual avg.; 0.0043 max~~	~~≤ 0.00059 annual avg.; 0.004 max~~		
~~(51)(g) Chlorpyrifos~~	~~Micrograms/L~~	~~≤ 0.041~~		~~≤ 0.0056~~	~~≤ 0.041~~	~~≤ 0.0056~~		
~~(51)(h) DDT~~	~~Micrograms/L~~	~~≤ 0.00059 annual avg.; 0.001 max~~		~~≤ 0.00059 annual avg.; 0.001 max~~	~~≤ 0.00059 annual avg.; 0.001 max~~	~~≤ 0.00059 annual avg.; 0.001 max~~		

~~Criteria for Surface Water Quality Classifications~~								
Parameter	Units	Class I		Class II	Class III and Class III-Limited (see Note 4)		Class IV	Class V
		Class I	Class I-Treated		Predominantly Fresh Waters	Predominantly Marine Waters		
~~(51)(i) Demeton~~	~~Micrograms/L~~	~~≤ 0.1~~		~~≤ 0.1~~	~~≤ 0.1~~	~~≤ 0.1~~		
~~(51)(j) Diazinon~~	~~Micrograms/L~~	~~≤ 0.17~~		~~≤ 0.82~~	~~≤ 0.17~~	~~≤ 0.82~~		
~~(51)(k) Dieldrin~~	~~Micrograms/L~~	~~≤ 0.00014 annual avg.; 0.0019 max~~		~~≤ 0.00014 annual avg.; 0.0019 max~~	~~≤ 0.00014 annual avg.; 0.0019 max~~	~~≤ 0.00014 annual avg.; 0.0019 max~~		
~~(51)(l) Endosulfan~~	~~Micrograms/L~~	~~≤ 0.056~~		~~≤ 0.0087~~	~~≤ 0.056~~	~~≤ 0.0087~~		
~~(51)(m) Endrin~~	~~Micrograms/L~~	~~≤ 0.0023~~		~~≤ 0.0023~~	~~≤ 0.0023~~	~~≤ 0.0023~~		
~~(51)(n) Guthion~~	~~Micrograms/L~~	~~≤ 0.01~~		~~≤ 0.01~~	~~≤ 0.01~~	~~≤ 0.01~~		
~~(51)(o) Heptachlor~~	~~Micrograms/L~~	~~≤ 0.00021 annual avg.; 0.0038 max~~		~~≤ 0.00021 annual avg.; 0.0036 max~~	~~≤ 0.00021 annual avg.; 0.0038 max~~	~~≤ 0.00021 annual avg.; 0.0036 max~~		
~~(51)(p) Lindane (g-benzene hexachloride)~~	~~Micrograms/L~~	~~See Minimum criteria in paragraph 62-302.500(1)(d), F.A.C.~~		~~See Minimum criteria in paragraph 62-302.500(1)(d), F.A.C.~~	~~See Minimum criteria in paragraph 62-302.500(1)(d), F.A.C.~~	~~See Minimum criteria in paragraph 62-302.500(1)(d), F.A.C.~~		
~~(51)(q) Malathion~~	~~Micrograms/L~~	~~≤ 0.1~~		~~≤ 0.1~~	~~≤ 0.1~~	~~≤ 0.1~~		
~~(51)(r) Methoxychlor~~	~~Micrograms/L~~	~~≤ 0.03~~		~~≤ 0.03~~	~~≤ 0.03~~	~~≤ 0.03~~		
~~(51)(s) Mirex~~	~~Micrograms/L~~	~~≤ 0.001~~		~~≤ 0.001~~	~~≤ 0.001~~	~~≤ 0.001~~		
(93) ~~(51)(t)~~ Parathion	Micrograms/L	≤ 0.04	≤ 0.04	≤ 0.04	≤ 0.04	≤ 0.04		
~~(51)(u) Toxaphene~~	~~Micrograms/L~~	~~≤ 0.0002~~		~~≤ 0.0002~~	~~≤ 0.0002~~	~~≤ 0.0002~~		
(94) Pentachloro-benzene	Micrograms/L	≤ 0.14 annual avg.	≤ 0.14 annual avg.	≤ 0.15 annual avg.	≤ 0.15 annual avg.	≤ 0.15 annual avg.		
(95) Pentachloro-phenol	Micrograms/L	≤ 0.067 annual avg.; ≤ 30 max	≤ 0.067 annual avg; ≤ 30 max	≤ 0.11 annual avg.	≤ 0.11 annual avg; ≤ 30 max	≤ 0.11 annual avg.		
(96) ~~(52)~~ (a) pH (Class I, Class I-Treated, and Class IV Waters)	Standard Units	Shall not vary more than one unit above or below natural background provided that the pH is not lowered to less than 6 units or raised above 8.5 units. If natural background is less than 6 units, the pH shall not vary below natural background or vary more than one unit above natural background. If natural background is higher than 8.5 units, the pH shall not vary above natural background or vary more than one unit below background.						
(96) ~~(52)~~ (b) pH (Class II Waters)	Standard Units	Shall not vary more than one unit above or below natural background of coastal waters as defined in paragraph 62-302.520(3)(b), F.A.C., or more than two-tenths unit above or below natural background of open waters as defined in paragraph 62-302.520(3)(f), F.A.C., provided that the pH is not lowered to less than 6.5 units or raised above 8.5 units. If natural background is less than 6.5 units, the pH shall not vary below natural background or vary more than one unit above natural background for coastal waters or more than two-tenths unit above natural background for open waters. If natural background is higher than 8.5 units, the pH shall not vary above natural background or vary more than one unit below natural background of coastal waters or more than two-tenths unit below natural background of open waters.						

~~Criteria for Surface Water Quality Classifications~~								
Parameter	Units	Class I		Class II	Class III and Class III-Limited (see Note 4)		Class IV	Class V
		Class I	Class I-Treated		Predominantly Fresh Waters	Predominantly Marine Waters		
(96) ~~(52)~~ (c) pH (Class III Waters)	Standard Units	Shall not vary more than one unit above or below natural background of predominantly fresh waters and coastal waters as defined in paragraph 62-302.520(3)(b), F.A.C. or more than two-tenths unit above or below natural background of open waters as defined in paragraph 62-302.520(3)(f), F.A.C., provided that the pH is not lowered to less than 6 units in predominantly fresh waters, or less than 6.5 units in predominantly marine waters, or raised above 8.5 units. If natural background is less than 6 units, in predominantly fresh waters or 6.5 units in predominantly marine waters, the pH shall not vary below natural background or vary more than one unit above natural background of predominantly fresh waters and coastal waters, or more than two-tenths unit above natural background of open waters. If natural background is higher than 8.5 units, the pH shall not vary above natural background or vary more than one unit below natural background of predominantly fresh waters and coastal waters, or more than two-tenths unit below natural background of open waters.							
(96) ~~(52)~~ (d) pH (Class V Waters)	Standard Units	Not lower than 5.0 nor greater than 9.5 except certain swamp waters which may be as low as 4.5.						
(97) Phenol	Milligrams/L	≤ 0.3	≤ 0.3	≤ 0.3	≤ 0.3	≤ 0.3	≤ 0.3	≤ 0.3
(98) ~~(53) (a)~~ Phenolic Compounds~~: Total~~		Phenolic compounds other than those produced by the natural decay of plant material, listed or unlisted, shall not taint the flesh of edible fish or shellfish or produce objectionable taste or odor in a drinking water supply.						
~~(53) (b) Total Chlorinated Phenols and Chlorinated Cresols~~	~~Micrograms/L~~	~~1. The total of all chlorinated phenols, and chlorinated cresols, except as set forth in (c)1. to (c)4. below, shall not exceed 1.0 unless higher values are shown not to be chronically toxic. Such higher values shall be approved in writing by the Secretary.~~ ~~2. The compounds listed in (c)1. to (c)6. below shall not exceed the limits specified for each compound.~~						~~1. The total of the following Phenolic compounds shall not exceed 50: a) Chlorinated phenols; b) Chlorinated cresols; and c) 2,4-dinitrophenol.~~
~~(53)(c) 1. Phenolic Compound: 2-chlorophenol~~	~~Micrograms/L~~	~~≤ 120~~		~~< 400 See Note (2).~~	~~< 400 See Note (2).~~	~~< 400 See Note (2).~~	~~< 400 See Note (2).~~	
~~(53)(c) 2. Phenolic Compound: 2,4-dichlorophenol~~	~~Micrograms/L~~	~~< 93 See Note (2).~~		~~< 790 See Note (2).~~	~~< 790 See Note (2).~~	~~< 790 See Note (2).~~	~~< 790 See Note (2).~~	
~~(53)(c) 3. Phenolic Compound: Pentachlorophenol~~	~~Micrograms/L~~	~~≤ 30 max; ≤ 0.28 annual avg; ≤ $e^{(1.005[pH]-5.29)}$~~		~~≤ 7.9~~	~~≤ 30 max; ≤ 8.2 annual avg; ≤ $e^{(1.005[pH]-5.29)}$~~	~~≤ 7.9~~	~~≤ 30~~	
~~(53)(c) 4. Phenolic Compound: 2,4,6-trichlorophenol~~	~~Micrograms/L~~	~~≤ 2.1 annual avg.~~		~~≤ 6.5 annual avg.~~	~~≤ 6.5 annual avg.~~	~~≤ 6.5 annual avg.~~	~~≤ 6.5 annual avg.~~	
~~(53)(c) 5. Phenolic Compound: 2,4-dinitrophenol~~	~~Milligrams/L~~	~~≤ 0.0697 See Note (2).~~		~~≤ 14.26 See Note (2).~~	~~≤ 14.26 See Note (2).~~	~~≤ 14.26 See Note (2).~~	~~≤ 14.26 See Note (2).~~	
~~(53)(c) 6. Phenolic Compound: Phenol~~	~~Milligrams/L~~	~~≤ 0.3~~		~~≤ 0.3~~	~~≤ 0.3~~	~~≤ 0.3~~	~~≤ 0.3~~	~~≤ 0.3~~

~~Criteria for Surface Water Quality Classifications~~								
		Class I			Class III and Class III-Limited (see Note 4)			
Parameter	Units	Class I	Class I-Treated	Class II	Predominantly Fresh Waters	Predominantly Marine Waters	Class IV	Class V
(99) ~~(54)~~ Phosphorus (Elemental)	Micrograms/L			≤ 0.1		≤ 0.1		
(100) ~~(55)~~ Phthalate Esters	Micrograms/L	≤ 3.0	≤ 3.0		≤ 3.0			
(101) ~~(56)~~ Polychlorinated Biphenyls (PCBs)	Micrograms/L	≤ 0.000098 ~~0.000044~~ annual avg.; ≤ 0.014 max	≤ 0.000098 annual avg.; ≤ 0.014 max	≤ 0.000098 ~~0.000045~~ annual avg.; ≤ 0.03 max	≤ 0.000098 ~~0.000045~~ annual avg.; ≤ 0.014 max	≤ 0.000098 ~~0.000045~~ annual avg.; ≤ 0.03 max		
(102) p,p'-Dichloro-diphenyltrichloro-ethane (DDT)	Micrograms/L	≤ 0.00015 annual avg.; ≤ 0.001 max	≤ 0.00015 annual avg.; ≤ 0.001 max	≤ 0.00015 annual avg.; ≤ 0.001 max	≤ 0.00015 annual avg.; ≤ 0.001 max	≤ 0.00015 annual avg.; ≤ 0.001 max		
~~(57)(a) Polycyclic Aromatic Hydrocarbons (PAHs). Total of: Acenaphthylene; Benzo(a)anthracene; Benzo(a)pyrene; Benzo(b)fluoran-thene; Benzo-(ghi)perylene; Benzo(k)fluoranthene; Chrysene; Dibenzo-(a,h)anthracene; Indeno(1,2,3-cd)pyrene; and Phenanthrene~~	~~Micrograms/L~~	~~≤ 0.0028 annual avg.~~		~~≤ 0.031 annual avg.~~	~~≤ 0.031annual avg.~~	~~≤ 0.031 annual avg.~~		
~~(57)(b)1. (Individual PAHs): Acenaphthene~~	~~Milligrams/L~~	~~< 1.2 See Note (2).~~		~~< 2.7 See Note (2).~~	~~< 2.7 See Note (2).~~	~~< 2.7 See Note (2).~~		
~~(57)(b)2. (Individual PAHs): Anthracene~~	~~Milligrams/L~~	~~< 9.6 See Note (2).~~		~~< 110 See Note (2).~~	~~< 110 See Note (2).~~	~~< 110 See Note (2).~~		
~~(57)(b)3. (Individual PAHs): Fluoranthene~~	~~Milligrams/L~~	~~< 0.3 See Note (2).~~		~~< 0.370 See Note (2).~~	~~< 0.370 See Note (2).~~	~~< 0.370 See Note (2).~~		
~~(57)(b)4. (Individual PAHs): Fluorene~~	~~Milligrams/L~~	~~< 1.3 See Note (2).~~		~~< 14 See Note (2).~~	~~< 14 See Note (2).~~	~~< 14 See Note (2).~~		
(103) ~~(57)(b)5. (Individual PAHs):~~ Pyrene	Micrograms/L ~~Milligrams/L~~	≤ 43 annual avg. ~~< 0.96 See Note (2).~~	≤ 43 annual avg.	≤ 49 annual avg. ~~< 11 See Note (2).~~	≤ 49 annual avg. ~~< 11 See Note (2).~~	≤ 49 annual avg. ~~< 11 See Note (2).~~		
(104) ~~(58)~~ (a) Radioactive substances (Combined radium 226 and 228)	Picocuries/L	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5	≤ 5

~~Criteria for Surface Water Quality Classifications~~								
		Class I			Class III and Class III-Limited (see Note 4)			
Parameter	Units	Class I	Class I-Treated	Class II	Predominantly Fresh Waters	Predominantly Marine Waters	Class IV	Class V
(104) ~~(58)~~ (b) Radioactive substances (Gross alpha particle activity including radium 226, but excluding radon and uranium)	Picocuries/L	≤ 15	≤ 15	≤ 15	≤ 15	≤ 15	≤ 15	≤ 15
(105) ~~(59)~~ Selenium	Micrograms/L	≤ 5.0	≤ 5.0	≤ 71	≤ 5.0	≤ 71		
(106) ~~(60)~~ Silver	Micrograms/L See Note (3).	≤ 0.07	≤ 0.07	See Minimum criteria in paragraph 62-302.500 (1)(c), F.A.C.	≤ 0.07	See Minimum criteria in paragraph 62-302.500(1)(c), F.A.C.		
(107) ~~(61)~~ Specific Conductance (see Conductance, Specific, above)								
(108) ~~(62)~~ Substances in concentrations which injure, are chronically toxic to, or produce adverse physiological or behavioral response in humans, plants, or animals		None shall be present.						
~~(63) 1,1,2,2-Tetrachloroethane~~	~~Micrograms/L~~	~~≤ 0.17 annual avg.~~		~~≤ 10.8 annual avg.~~	~~≤ 10.8 annual avg.~~	~~≤ 10.8 annual avg.~~		
(109) ~~(64)~~ Tetrachloroethylene (Perchloroethylene or 1,1,2,2-tetrachloro-ethene)	Micrograms/L	≤ 23 ~~0.8~~ annual avg.~~,~~ ~~≤ 3.0 max~~	≤ 23 annual avg.	≤ 66 ~~8.85~~ annual avg.	≤ 66 ~~8.85~~ annual avg.	≤ 66 ~~8.85~~ annual avg.		
(110) ~~(65)~~ Thallium	Micrograms/L	≤ ~~<~~ 1.7	≤ 1.7	≤ ~~<~~ 6.3	≤ ~~<~~ 6.3	≤ ~~<~~ 6.3		
(111) Toluene	Micrograms/L	≤ 56 annual avg.	≤ 56 annual avg.	≤ 610 annual avg.	≤ 610 annual avg.	≤ 610 annual avg.		
~~(66) Thermal Criteria (See Rule 62-302.520)~~								
(112) ~~(67)~~ Total Dissolved Gases	Class I Waters, Class I-Treated Waters, Class II Waters, Class III Waters, Class III-Limited Waters: The p~~P~~ercent of the saturation value for gases at the existing atmospheric and hydrostatic pressures shall be ≤ 110% of saturation value.							
(113) Toxaphene	Micrograms/L	≤ 0.0002	≤ 0.0002	≤ 0.0002	≤ 0.0002	≤ 0.0002		
(114) ~~(68)~~ Transparency (Class I Waters, Class I-Treated Waters, Class II Waters, Class III, and Class III-Limited Waters)	Depth of the compensation point within the water column for photosynthetic activity	The annual average value shall not be reduced by more than 10% as compared to the natural background value. Annual average values shall be based on a minimum of three samples, with each sample collected at least three months apart.						
(115) trans-1,2-Dichloroethylene (DCE)	Micrograms/L	≤ 120 annual avg.	≤ 120 annual avg.	≤ 3900 annual avg.	≤ 3900 annual avg.	≤ 3900 annual avg.		

~~Criteria for Surface Water Quality Classifications~~								
Parameter	Units	Class I		Class II	Class III and Class III-Limited (see Note 4)		Class IV	Class V
		Class I	Class I-Treated		Predominantly Fresh Waters	Predominantly Marine Waters		
(116) ~~(69)~~ Trichloroethylene (T~~t~~richloroethene or TCE)	Micrograms/L	≤ 1.3 ~~2.7~~ annual avg.~~;~~ ~~≤ 3.0 max~~	≤ 1.3 annual avg.	≤ 15 ~~80.7~~ annual avg.	≤ 15 ~~80.7~~ annual avg.	≤ 15 ~~80.7~~ annual avg.		
(117) ~~(70)~~ Turbidity	Nephelometric Turbidity Units (NTU)	≤ 29 above natural background conditions						
(118) Vinyl Chloride	Micrograms/L	≤ 0.048 annual avg.	≤ 0.048 annual avg.	≤ 3.0 annual avg.	≤ 3.0 annual avg.	≤ 3.0 annual avg.		
(119) ~~(71)~~ Zinc	Micrograms/L See Notes (1) and (3).	Zn ≤ $e^{(0.8473[lnH]+0.884)}$	Zn ≤ $e^{(0.8473[lnH]+0.884)}$	≤ 86	Zn ≤ $e^{(0.8473[lnH]+0.884)}$	≤ 86	≤ 1,000	≤ 1,000
(120) 1,1-Dichloro-ethylene	Micrograms/L	≤ 300 annual avg.	≤ 300 annual avg.	≤ 16000 annual avg.	≤ 16000 annual avg.	≤ 16000 annual avg.		
(121) 1,1,1-Trichloro-ethane	Micrograms/L	≤ 12000 annual avg.	≤ 12000 annual avg.	≤ 190000 annual avg.	≤ 190000 annual avg.	≤ 190000 annual avg.		
(122) 1,1,2-Trichloro-ethane	Micrograms/L	≤ 1.2 annual avg.	≤ 1.2 annual avg.	≤ 20 annual avg.	≤ 20 annual avg.	≤ 20 annual avg.		
(123) 1,1,2,2-Tetra-chloroethane	Micrograms/L	≤ 0.35 annual avg.	≤ 0.35 annual avg.	≤ 5.9 annual avg.	≤ 5.9 annual avg.	≤ 5.9 annual avg.		
(124) 1,2-Dichloro-ethane	Micrograms/L	≤ 22 annual avg.	≤ 22 annual avg.	≤ 1200 annual avg.	≤ 1200 annual avg.	≤ 1200 annual avg.		
(125) 1,2-Dichloro-propane	Micrograms/L	≤ 2.0 annual avg.	≤ 2.0 annual avg.	≤ 63 annual avg.	≤ 63 annual avg.	≤ 63 annual avg.		
(126) 1,2-Diphenyl-hydrazine	Micrograms/L	≤ 0.077 annual avg.	≤ 0.077 annual avg.	≤ 0.48 annual avg.	≤ 0.48 annual avg.	≤ 0.48 annual avg.		
(127) 1,3-Dichloro-propene	Micrograms/L	≤ 0.59 annual avg.	≤ 0.59 annual avg.	≤ 23 annual avg.	≤ 23 annual avg.	≤ 23 annual avg.		
(128) 1,2-Dichloro-benzene	Micrograms/L	≤ 1400 annual avg.	≤ 1400 annual avg.	≤ 3900 annual avg.	≤ 3900 annual avg.	≤ 3900 annual avg.		
(129) 1,3-Dichloro-benzene	Micrograms/L	≤ 8.3 annual avg.	≤ 8.3 annual avg.	≤ 18 annual avg.	≤ 18 annual avg.	≤ 18 annual avg.		
(130) 1,4-Dichloro-benzene	Micrograms/L	≤ 340 annual avg.	≤ 340 annual avg.	≤ 1100 annual avg.	≤ 1100 annual avg.	≤ 1100 annual avg.		
(131) 1,2,4-Trichloro-benzene	Micrograms/L	≤ 0.14 annual avg.	≤ 0.14 annual avg.	≤ 0.15 annual avg.	≤ 0.15 annual avg.	≤ 0.15 annual avg.		
(132) 2-Chloro-naphthalene	Micrograms/L	≤ 960 annual avg.	≤ 960 annual avg.	≤ 1400 annual avg.	≤ 1400 annual avg.	≤ 1400 annual avg.		
(133) 2-Chlorophenol	Micrograms/L	≤ 30 annual avg.	≤ 30 annual avg.	≤ 860 annual avg.	≤ 860 annual avg.	≤ 860 annual avg.		
(134) 2,4-Dichloro-phenol	Micrograms/L	≤ 16 annual avg.	≤ 16 annual avg.	≤ 65 annual avg.	≤ 65 annual avg.	≤ 65 annual avg.		
(135) 2,4-Dimethyl-phenol	Micrograms/L	≤ 120 annual avg.	≤ 120 annual avg.	≤ 2800 annual avg.	≤ 2800 annual avg.	≤ 2800 annual avg.		
(136) 2,4-Dinitro-phenol	Micrograms/L	≤ 12 annual avg.	≤ 12 annual avg.	≤ 330 annual avg.	≤ 330 annual avg.	≤ 330 annual avg.		
(137) 2,4-Dinitro-toluene	Micrograms/L	≤ 0.11 annual avg.	≤ 0.11 annual avg.	≤ 3.5 annual avg.	≤ 3.5 annual avg.	≤ 3.5 annual avg.		
(138) 2,4,6-Trichloro-phenol	Micrograms/L	≤ 3.3 annual avg.	≤ 3.3 annual avg.	≤ 6.6 annual avg.	≤ 6.6 annual avg.	≤ 6.6 annual avg.		

~~Criteria for Surface Water Quality Classifications~~								
Parameter	Units	Class I		Class II	Class III and Class III-Limited (see Note 4)		Class IV	Class V
		Class I	Class I-Treated		Predominantly Fresh Waters	Predominantly Marine Waters		
(139) 2-Methyl-4,6-Dinitrophenol	Micrograms/L	≤ 1.8 annual avg.	≤ 1.8 annual avg.	≤ 29 annual avg.	≤ 29 annual avg.	≤ 29 annual avg.		
(140) 3,3'-Dichloro-benzidine	Micrograms/L	≤ 0.11 annual avg.	≤ 0.11 annual avg.	≤ 0.34 annual avg.	≤ 0.34 annual avg.	≤ 0.34 annual avg.		
(141) 3-Methyl-4-Chlorophenol	Micrograms/L	≤ 540 annual avg.	≤ 540 annual avg.	≤ 2700 annual avg.	≤ 2700 annual avg.	≤ 2700 annual avg.		

Notes**:** (1) "ln H" means the natural logarithm of total hardness expressed as milligrams/L of $CaCO_3$. For metals criteria involving equations with hardness, the hardness shall be set at 25 mg/L if actual hardness is < 25 mg/L and set at 400 mg/L if actual hardness is > 400 mg/L. (2) This criterion is protective of human health not of aquatic life. (3) For application of dissolved metals criteria see paragraph 62-302.500(2)(d), F.A.C. (4) Class III-Limited waters have at least one Site Specific Alternative Criterion as established under Rule 62-302.800, F.A.C.

Rulemaking Authority 403.061, 403.062, 403.087, 403.504, 403.704, 403.804 FS. Law Implemented 403.021(11), 403.061, 403.087, 403.088, 403.141, 403.161, 403.182, 403.502, 403.702, 403.708 FS. History–New 1-28-90, Formerly 17-3.065, Amended 2-13-92, 6-17-92, Formerly 17-302.540, 17-302.550, 17-302.560, 17-302.570, 17-302.580, Amended 4-25-93, Formerly 17-302.530, Amended 1-23-95, 1-15-96, 5-15-02, 7-19-04, 12-7-06, 8-5-10, 7-3-12, 8-1-13, 2-17-16,___.