

## 62-302.530. Human Use Criteria.

			HU-1	HU-2	HU-3		HU-4	HU-5	HU-6	HU-7
Criteria Attribute	Parameter	Units			Pre-dominantly Fresh Waters	Pre-dominantly Marine Waters				
AG	(1) Alkalinity	Milligrams/L as CaCO <sub>3</sub>							≤ 600	
HH-FC	(4) Antimony	Micrograms/L	≤ 14.0	≤ 4,300	≤ 4,300	≤ 4,300	-	-		
HH-DW, FC	(5) (a) Arsenic (total)	Micrograms/L	≤ 10	≤ 50	≤ 50	≤ 50	-	-	≤ 50	≤ 50
HH-REC	(6) Bacteriological Quality (Fecal Coliform Bacteria)	Number per 100 ml (Most Probable Number (MPN) or Membrane Filter (MF))	MPN or MF counts shall not exceed a monthly average of 200, nor exceed 400 in 10% of the samples, nor exceed 800 on any one day. Monthly averages shall be expressed as geometric means based on a minimum of 5 samples taken over a 30 day period.	MPN shall not exceed a median value of 14 with not more than 10% of the samples exceeding 43, nor exceed 800 on any one day.	MPN or MF counts shall not exceed a monthly average of 200, nor exceed 400 in 10% of the samples, nor exceed 800 on any one day. Monthly averages shall be expressed as geometric means based on a minimum of 10 samples taken over a 30 day period.	MPN or MF counts shall not exceed a monthly average of 200, nor exceed 400 in 10% of the samples, nor exceed 800 on any one day. Monthly averages shall be expressed as geometric means based on a minimum of 10 samples taken over a 30 day period.				
HH-DW	(7) Barium	Milligrams/L	≤ 1							
HH-DW, FC	(8) Benzene	Micrograms/L	≤ 1.18	≤ 71.28 annual avg.	≤ 71.28 annual avg.	≤ 71.28 annual avg.	-	-		

HH-DW, FC	(9) Beryllium	Micrograms/L	$\leq 0.0077$ annual avg.	$\leq 0.13$ annual avg.	$\leq 0.13$ annual avg.	$\leq 0.13$ annual avg.	-	-	$\leq 100$ in waters with a hardness in mg/L of CaCO <sub>3</sub> of less than 250 and shall not exceed 500 in harder waters	
AG	(12) Boron	Milligrams/L							$\leq 0.75$	
HH-DW, FC	(16) Carbon tetrachloride	Micrograms/L	$\leq 0.25$ annual avg.; 3.0 max	$\leq 4.42$ annual avg.	$\leq 4.42$ annual avg.	$\leq 4.42$ annual avg.	-	-		
HH-DW, IND	(17) Chlorides	Milligrams/L	$\leq 250$	-	-	-	-	-		In predominant ly marine waters, not increased more than 10% above normal background. Normal daily and seasonal fluctuations shall be maintained.
AG, IND	(19) (a) Chromium (trivalent)	Micrograms/L  measured as total recoverable Chromium See Notes (1) and (3).		-	-	-	-	-	$\text{Cr (III)} \leq e^{(0.819[\ln H]+0.6848)}$	In predominant ly fresh waters, $\leq e^{(0.819[\ln H]+0.6848)}$
AG, IND	(19) (b) Chromium (hexavalent)	Micrograms/L  See Note (3).		-	-	-	-	-	$\leq 11$	In predominant ly fresh waters, $\leq 11$ . In predominant ly marine waters, $\leq 50$

AG	(21) Color, etc. (see also Minimum Criteria, Odor, Phenols, etc.)	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.	
AG, IND	(22) Conductance, Specific	Micromhos/cm							Shall not be increased more than 50% above background or to 1275, whichever is greater.	Shall not exceed 4,000
AG, IND	(23) Copper	Micrograms/L See Notes (1) and (3).							≤ 500	≤ 500
AG, IND	(24) Cyanide	Micrograms/L							≤ 5.0	≤ 5.0
ALL	(25) Definitions (see Section 62-302.200, F.A.C.)								-	-
AG, IND	(26) Detergents	Milligrams/L							≤ 0.5	≤ 0.5
HH-DW, FC	(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.	-	-		
HH-DW, FC	(28) Dichloromethane (methylene chloride)	Micrograms/L	≤ 4.65 annual avg.	≤ 1,580 annual avg.	≤ 1,580 annual avg.	≤ 1,580 annual avg.	-	-		

	chloride)									
HH-DW, FC	(29) 2,4-Dinitrotoluene	Micrograms/L	≤ 0.11 annual avg.	≤ 9.1 annual avg.	≤ 9.1 annual avg.	≤ 9.1 annual avg.	-	-		
AG, IND	(30) Dissolved Oxygen	Milligrams/L	-	-	-	-	-	-	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.
HH-DW	(31) Dissolved Solids	Milligrams/L	≤ 500 as a monthly avg.; ≤ 1,000 max							
HH-DW, AG, IND	(32) Fluorides	Milligrams/L	≤ 1.5	≤ 1.5					≤ 10.0	≤ 10.0
ALL	(33) "Free Froms" (see Minimum Criteria in Section 62-302.500, F.A.C.)		Applicable to all classes							
ALL	(34) "General Criteria" (see Section 62-302.500, F.A.C. and individual criteria)		Applicable to all classes							

HH-DW	(35) (a) Halomethanes (Total trihalomethanes) (total of bromoform, chlorodibromomethane, dichlorobromomethane, and chloroform). Individual halomethanes shall not exceed (b)1 to (b)5. below.	Micrograms/L	$\leq 80$							
HH-FC	(35) (b) 1. Halomethanes (individual): Bromoform	Micrograms/L	$\leq 4.3$ annual avg.	$\leq 360$ annual avg.	$\leq 360$ annual avg.	$\leq 360$ annual avg.	-	-		
HH-DW, FC	(35) (b) 2. Halomethanes (individual): Chlorodibromomethane	Micrograms/L	$\leq 0.41$ annual avg.	$\leq 34$ annual avg.	$\leq 34$ annual avg.	$\leq 34$ annual avg.	-	-		
HH-DW, FC	(35) (b) 3. Halomethanes (individual): Chloroform	Micrograms/L	$\leq 5.67$ annual avg.	$\leq 470.8$ annual avg.	$\leq 470.8$ annual avg.	$\leq 470.8$ annual avg.	-	-		
HH-DW, FC	(35) (b) 4. Halomethanes (individual): Chloromethane (methyl chloride)	Micrograms/L	$\leq 5.67$ annual avg.	$\leq 470.8$ annual avg.	$\leq 470.8$ annual avg.	$\leq 470.8$ annual avg.	-	-		
HH-DW, FC	(35) (b) 5. Halomethanes (individual): Dichlorobromomethane	Micrograms/L	$\leq 0.27$ annual avg.	$\leq 22$ annual avg.	$\leq 22$ annual avg.	$\leq 22$ annual avg.	-	-		
HH-DW, FC	(36) Hexachlorobutadiene	Micrograms/L	$\leq 0.45$ annual avg.	$\leq 49.7$ annual avg.	$\leq 49.7$ annual avg.	$\leq 49.7$ annual avg.	-	-		

HH-DW, AG	(38) Iron	Milligrams/L	< 1	-					≤ 1	
AG, IND	(39) Lead	Micrograms/L See Notes (1) and (3).	-						≤ 50	≤ 50
HH-FC	(40) Manganese	Milligrams/L		≤ 0.1						
HH-FC	(41) Mercury	Micrograms/L	≤ 0.012	≤ 0.025	≤ 0.012	≤ 0.025			≤ 0.2	≤ 0.2
ALL	(42) Minimum Criteria (see Section 62-302.500, F.A.C.)		Applicable to all classes							
ALL	(43) Mixing Zones (See Section 62-4.244, F.A.C.)									
AG	(44) Nickel	Micrograms/L See Notes (1) and (3).							≤ 100	
HH-DW	(45) Nitrate	Milligrams/L as N	≤ 10 or that concentration that exceeds the nutrient criteria							
ALL	(47) (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 Sections 62-302.300, 62-302.700, and 62-4.242, F.A.C.							
HH-REC	(48) 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.
AG, IND	(49) (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

											10.0
HH-REC	(49) (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.								
	<b>(50) Pesticides and Herbicides</b>										
HH-FC	(50) (a) 2,4,5-TP	Micrograms/L	≤ 10								
HH-FC	(50) (b) 2-4-D	Micrograms/L	≤ 100								
HH-FC	(50) (c) Aldrin	Micrograms/L	≤ .00013 annual avg.; 3.0 max	≤ .00014 annual avg.; 1.3 max	≤ .00014 annual avg.; 3.0 max	≤ .00014 annual avg.; 1.3 max	-	-			
HH-FC	(50) (d) Beta-hexachloro-cyclohexane (b-BHC)	Micrograms/L	≤ 0.014 annual avg.	≤ 0.046 annual avg.	≤ 0.046 annual avg.	≤ 0.046 annual avg.	-	-			
HH-FC	(50) (e) 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	-	-			
HH-FC	(50) (f) 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	-	-			
HH-FC	(50) (h) 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	-	-			
HH-FC	(50) (l) 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	-	-			
HH-FC	(50) (m) Lindane (g-benzene hexachloride)	Micrograms/L	≤ 0.019 annual avg.; 0.08 max	≤ 0.063 annual avg.; 0.16 max	≤ 0.063 annual avg.; 0.08 max	≤ 0.063 annual avg.; 0.16 max					
HH-DW, FC	(52)(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.								

HH-REC	(52) (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.							1. The total of the following Phenolic compounds shall not exceed 50: a) Chlorinated phenols; b) Chlorinated cresols; and c) 2,4-dinitrophenol.
			2. The compounds listed in (c) 1. to (c) 6. below shall not exceed the limits specified for each compound.							
HH-REC	(52) (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).	
HH-REC	(52) (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).	
AG	(52) (c) 3. Phenolic Compound: Penta-chlorophenol	Micrograms/L	- - -	-	- - -	-	- - -	- - -	≤ 30	
HH-REC	(52) (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.	
HH-REC	(52) (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).	
HH-REC	(52) (c) 6. Phenolic Compound: Phenol	Milligrams/L	≤ 0.3	≤ 0.3	≤ 0.3	≤ 0.3	- -	- -	≤ 0.3	≤ 0.3
HH-DW	(55) Polychlorinated Biphenyls (PCBs)	Micrograms/L	≤ 0.000044 annual avg.; 0.014 max	-	-	-	- -	- -		

HH-FC	(56) (a) Polycyclic Aromatic Hydrocarbons (PAHs). Total of: Acenaphthylene; Benzo(a)anthrac ene; Benzo(a)pyrene; Benzo(b)fluoran thene; Benzo(ghi)peryl ene; Benzo(k)fluoran thene; Chrysene; Dibenzo- (a,h)anthracene; Indeno(1,2,3- cd)pyrene; and Phenan	Micrograms/L	$\leq 0.0028$ annual avg.	$\leq 0.031$ annual avg.	$\leq 0.031$ annual avg.	$\leq 0.031$ annual avg.	-	-		
HH-FC	(56) (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).				
HH-FC	(56) (b) 2. (Individual PAHs): Anthracene	Milligrams/L	< 9.6 See Note (2).	< 110 See Note (2).	< 110 See Note (2).	< 110 See Note (2).				
HH-FC	(56) (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).				
HH-FC	(56) (b) 4. (Individual PAHs): Fluorene	Milligrams/L	< 1.3 See Note (2).	< 14 See Note (2).	< 14 See Note (2).	< 14 See Note (2).				
HH-FC	(56) (b) 5. (Individual PAHs): Pyrene	Milligrams/L	< 0.96 See Note (2).	< 11 See Note (2).	< 11 See Note (2).	< 11 See Note (2).				
HH-FC	(57) (a) Radioactive substances (Combined radium 226 and 228)	Picocuries/L	$\leq 5$	$\leq 5$	$\leq 5$	$\leq 5$	-	-	$\leq 5$	$\leq 5$

HH-FC	(57) (b) Radioactive substances (Gross alpha particle activity including radium 226, but excluding radon and uranium)	Picocuries/L	≤ 15	≤ 15	≤ 15	≤ 15	-	-	≤ 15	≤ 15
HH-FC	(62) 1,1,2,2-Tetrachloroethane	Micrograms/L	≤ 0.17 annual avg.	≤ 10.8 annual avg.	≤ 10.8 annual avg.	≤ 10.8 annual avg.	-	-		
HH-FC	(63) Tetrachloroethylene (1,1,2,2-tetrachloroethene)	Micrograms/L	≤ 0.8 annual avg., ≤ 3.0 max	≤ 8.85 annual avg.	≤ 8.85 annual avg.	≤ 8.85 annual avg.	-	-		
HH-FC	(64) Thallium	Micrograms/L	< 1.7	< 6.3	< 6.3	< 6.3				
HH-FC	(68) Trichloroethylene (trichloroethene)	Micrograms/L	≤ 2.7 annual avg., ≤ 3.0 max	≤ 80.7 annual avg.	≤ 80.7 annual avg.	≤ 80.7 annual avg.	-	-		
AG, IND	(69) Turbidity	Nephelometric Turbidity Units (NTU)	-	-	-	-	-	-	≤ 29 above natural background conditions	≤ 29 above natural background conditions
AG, IND	(70) Zinc	Micrograms/L See Notes (1) and (3).							≤ 1,000	≤ 1,000