https://ecfr.io/Title-40/pt40.24.131#se40.24.131_138
Extracted by GlobalMSDS
17th September 2019

§131.38 Establishment of numeric criteria for priority toxic pollutants for the State of California.

(a) Scope. This section promulgates criteria for priority toxic pollutants in the State of California for inland surface waters and enclosed bays and estuaries. This section also contains a compliance schedule provision.

(b)(1) Criteria for Priority Toxic Pollutants in the State of California as described in the following table:

A		**B Freshwater**		**C Saltwater**		**D Human health (10−6 risk for carcinogens) for consumption of:**	
Number compound	**CAS No.**	**Criterion maximum conc.[d] (µg/L) B1**	**Criterion continuous conc.[d] (µg/L) B2**	**Criterion maximum conc.[d] (µg/L) C1**	**Criterion continuous conc.[d] (µg/L) C2**	**Water and organisms (µg/L) D1**	**Organisms only (µg/L) D2**
1. Antimony	7440360					[a,s]14	[a,t]4300
2. Arsenic [b]	7440382	[i,m,w]340	[i,m,w]150	[i,m]69	[i,m]36		
3. Beryllium	7440417					([n])	([n])
4. Cadmium [b]	7440439	[e,i,m,w,x]4.3	[e,i,m,w]2.2	[i,m]42	[i,m]9.3	([n])	([n])
5a. Chromium (III)	16065831	[e,i,m,o]550	[e,i,m,o]180			([n])	([n])
5b. Chromium (VI) [b]	18540299	[i,m,w]16	[i,m,w]11	[i,m]1100	[i,m]50	([n])	([n])
6. Copper [b]	7440508	[e,i,m,w,x]13	[e,i,m,w]9.0	[i,m]4.8	[i,m]3.1	1300	
7. Lead [b]	7439921	[e,i,m,z]65	[e,i,m,z]2.5	[i,m]210	[i,m]8.1	([n])	([n])
8. Mercury [b]	7439976	[Reserved]	[Reserved]	[Reserved]	[Reserved]	[a]0.050	[a]0.051
9. Nickel [b]	7440020	[e,i,m,w]470	[e,i,m,w]52	[i,m]74	[i,m]8.2	[a]610	[a]4600
10. Selenium [b]	7782492	[p][Reserved]	[q]5.0	[i,m]290	[i,m]71	([n])	([n])
11. Silver [b]	744022	[e,i,m]3.4		[i,m]1.9			

https://ecfr.io/Title-40/pt40.24.131#se40.24.131_138
Extracted by GlobalMSDS
17th September 2019

	4						
12. Thallium	7440280					[a,s]1.7	[a,t]6.3
13. Zinc [b]	7440666	[e,i,m,w,x]120	[e,i,m,w]120	[i,m]90	[i,m]81		
14. Cyanide [b]	57125	[o]22	[o]5.2	[r]thnsp;1	[r]1	[a]700	[a,j]220,000
15. Asbestos	1332214					[k,s]7,000,000 fibers/l	
16. 2,3,7,8-TCDD (Dioxin)	1746016					[c]>0.000000013	[c]>0.000000014
17. Acrolein	107028					[s]>320	[t]>780
18. Acrylonitrile	107131					[a,c,s]0.059	[a,c,t]0.66
19. Benzene	71432					[a,c]1.2	[a,c]71
20. Bromoform	75252					[a,c]4.3	[a,c]360
21. Carbon Tetrachloride	56235					[a,c,s]0.25	[a,c,t]4.4
22. Chlorobenzene	108907					[a,s]680	[a,j,t]21,000
23. Chlorodibromomethane	124481					[a,c,y]0.41	[a,c]34
24. Chloroethane	75003						
25. 2-Chloroethylvinyl Ether	110758						
26. Chloroform	67663					[Reserved]	[Reserved]
27. Dichlorobromomethane	75274					[a,c,y]0.56	[a,c]46
28. 1,1-Dichloroethane	75343						
29. 1,2-Dichloroethane	107062					[a,c,s]0.38	[a,c,t]99
30. 1,1-Dichloroethylene	75354					[a,c,s]0.057	[a,c,t]3.2
31. 1,2-Dichloropropane	78875					[a]0.52	[a]39
32. 1,3-Dichloropropylene	542756					[a,s]10	[a,t]1,700
33. Ethylbenzene	100414					[a,s]3,100	[a,t]29,000
34. Methyl Bromide	74839					[a]48	[a]4,000
35. Methyl Chloride	74873					([n])	([n])
36. Methylene Chloride	75092					[a,c]4.7	[a,c]1,600
37. 1,1,2,2-Tetrachloroethane	79345					[a,c,s]0.17	[a,c,t]11
38. Tetrachloroethylene	127184					[c,s]0.8	[c,t]8.85

https://ecfr.io/Title-40/pt40.24.131#se40.24.131_138
Extracted by GlobalMSDS
17th September 2019

39. Toluene	108883					[a]6,800	[a]200,000
40. 1,2-Trans-Dichloroethylene	156605					[a]700	[a]140,000
41. 1,1,1-Trichloroethane	71556					([n])	([n])
42. 1,1,2-Trichloroethane	79005					[a,c,s]0.60	[a,c,t]42
43. Trichloroethylene	79016					[c,s]2.7	[c,t]81
44. Vinyl Chloride	75014					[c,s]2	[c,t]525
45. 2-Chlorophenol	95578					[a]120	[a]400
46. 2,4-Dichlorophenol	120832					[a,s]93	[a,t]790
47. 2,4-Dimethylphenol	105679					[a]540	[a]2,300
48. 2-Methyl-4,6-Dinitrophenol	534521					[s]>13.4	[t]>765
49. 2,4-Dinitrophenol	51285					[a,s]70	[a,t]14,000
50. 2-Nitrophenol	88755						
51. 4-Nitrophenol	100027						
52. 3-Methyl-4-Chlorophenol	59507						
53. Pentachlorophenol	87865	[f,w]19	[f,w]15	13	7.9	[a,c]0.28	[a,c,j]8.2
54. Phenol	108952					[a]21,000	[a,j,t]4,600,000
55. 2,4,6-Trichlorophenol	88062					[a,c]2.1	[a,c]6.5
56. Acenaphthene	83329					[a]1,200	[a]2,700
57. Acenaphthylene	208968						
58. Anthracene	120127					[a]9,600	[a]110,000
59. Benzidine	92875					[a,c,s]0.00012	[a,c,t]0.00054
60. Benzo(a)Anthracene	56553					[a,c]0.0044	[a,c]0.049
61. Benzo(a)Pyrene	50328					[a,c]0.0044	[a,c]0.049
62. Benzo(b)Fluoranthene	205992					[a,c]0.0044	[a,c]0.049
63. Benzo(ghi)Perylene	191242						
64. Benzo(k)Fluoranthene	207089					[a,c]0.0044	[a,c]0.049
65. Bis(2-Chloroethoxy)Methane	111911						

66. Bis(2-Chloroethyl)Ether	111444					[a,c,s]0.031	[a,c,t]1.4
67. Bis(2-Chloroisopropyl)Ether	108601					[a]1,400	[a,t]170,000
68. Bis(2-Ethylhexyl)Phthalate	117817					[a,c,s]1.8	[a,c,t]5.9
69. 4-Bromophenyl Phenyl Ether	101553						
70. Butylbenzyl Phthalate	85687					[a]3,000	[a]5,200
71. 2-Chloronaphthalene	91587					[a]1,700	[a]4,300
72. 4-Chlorophenyl Phenyl Ether	7005723						
73. Chrysene	218019					[a,c]0.0044	[a,c]0.049
74. Dibenzo(a,h)Anthracene	53703					[a,c]0.0044	[a,c]0.049
75. 1,2 Dichlorobenzene	95501					[a]2,700	[a]17,000
76. 1,3 Dichlorobenzene	541731					400	2,600
77. 1,4 Dichlorobenzene	106467					400	2,600
78. 3,3′-Dichlorobenzidine	91941					[a,c,s]0.04	[a,c,t]0.077
79. Diethyl Phthalate	84662					[a,s]23,000	[a,t]120,000
80. Dimethyl Phthalate	131113					[s]>313,000	[t]>2,900,000
81. Di-n-Butyl Phthalate	84742					[a,s]2,700	[a,t]12,000
82. 2,4-Dinitrotoluene	121142					[c,s]0.11	[c,t]9.1
83. 2,6-Dinitrotoluene	606202						
84. Di-n-Octyl Phthalate	117840						
85. 1,2-Diphenylhydrazine	122667					[a,c,s]0.040	[a,c,t]0.54
86. Fluoranthene	206440					[a]300	[a]370
87. Fluorene	86737					[a]1,300	[a]14,000
88. Hexachlorobenzene	118741					[a,c]0.00075	[a,c]0.00077
89.	87683					[a,c,s]0.44	[a,c,t]50

https://ecfr.io/Title-40/pt40.24.131#se40.24.131_138
Extracted by GlobalMSDS
17th September 2019

Hexachlorobutadiene							
90. Hexachlorocyclopentadiene	77474					[a,s]240	[a,j,t]17,000
91. Hexachloroethane	67721					[a,c,s]1.9	[a,c,t]8.9
92. Indeno(1,2,3-cd) Pyrene	193395					[a,c]0.0044	[a,c]0.049
93. Isophorone	78591					[c,s]8.4	[c,t]600
94. Naphthalene	91203						
95. Nitrobenzene	98953					[a,s]17	[a,j,t]1,900
96. N-Nitrosodimethylamine	62759					[a,c,s]0.00069	[a,c,t]8.1
97. N-Nitrosodi-n-Propylamine	621647					[a]0.005	[a]1.4
98. N-Nitrosodiphenylamine	86306					[a,c,s]5.0	[a,c,t]16
99. Phenanthrene	85018						
100. Pyrene	129000					[a]960	[a]11,000
101. 1,2,4-Trichlorobenzene	120821						
102. Aldrin	309002	[g]>3		[g]>1.3		[a,c]0.00013	[a,c]0.00014
103. alpha-BHC	319846					[a,c]0.0039	[a,c]0.013
104. beta-BHC	319857					[a,c]0.014	[a,c]0.046
105. gamma-BHC	58899	[w]>0.95		[g]>0.16		[c]>0.019	[c]>0.063
106. delta-BHC	319868						
107. Chlordane	57749	[g]>2.4	[g]>0.0043	[g]>0.09	[g]>0.004	[a,c]0.00057	[a,c]0.00059
108. 4,4′-DDT	50293	[g]>1.1	[g]>0.001	[g]>0.13	[g]>0.001	[a,c]0.00059	[a,c]0.00059
109. 4,4′-DDE	72559					[a,c]0.00059	[a,c]0.00059
110. 4,4′-DDD	72548					[a,c]0.00083	[a,c]0.00084
111. Dieldrin	60571	[w]>0.24	[w]>0.056	[g]>0.71	[g]>0.0019	[a,c]0.00014	[a,c]0.00014
112. alpha-Endosulfan	959988	[g]>0.22	[g]>0.056	[g]>0.034	[g]>0.0087	[a]110	[a]240
113. beta-Endosulfan	33213659	[g]>0.22	[g]>0.056	[g]>0.034	[g]>0.0087	[a]110	[a]240
114. Endosulfan Sulfate	1031078					[a]110	[a]240
115. Endrin	72208	[w]>0.086	[w]>0.036	[g]>0.037	[g]>0.0023	[a]0.76	[a,j]0.81
116. Endrin Aldehyde	7421934					[a]0.76	[a,j]0.81
117. Heptachlor	76448	[g]>0.52	[g]>0.003	[g]>0.053	[g]>0.003	[a,c]0.00021	[a,c]0.00021

			8		6		
118. Heptachlor Epoxide	1024573	[g]>0.52	[g]>0.0038	[g]>0.053	[g]>0.0036	[a,c]0.00010	[a,c]0.00011
119-125. Polychlorinated biphenyls (PCBs)			[ur]>0.014		[ur]>0.03	[c,v]0.00017	[c,v]0.00017
126. Toxaphene	8001352	0.73	0.0002	0.21	0.0002	[a,c]0.00073	[a,c]0.00075
Total Number of Criteria[hr]>		22	21	22	20	92	90

Footnotes to Table in Paragraph (b)(1):

[a]Criteria revised to reflect the Agency q1* or RfD, as contained in the Integrated Risk Information System (IRIS) as of October 1, 1996. The fish tissue bioconcentration factor (BCF) from the 1980 documents was retained in each case.

[b]Criteria apply to California waters except for those waters subject to objectives in Tables III-2A and III-2B of the San Francisco Regional Water Quality Control Board's (SFRWQCB) 1986 Basin Plan that were adopted by the SFRWQCB and the State Water Resources Control Board, approved by the EPA, and which continue to apply. For copper and nickel, criteria apply to California waters except for waters south of Dumbarton Bridge in San Francisco Bay that are subject to the objectives in the SFRWQCB's Basin Plan as amended by SFRWQCB Resolution R2-2002-0061, dated May 22, 2002, and approved by the State Water Resources Control Board. The EPA approved the aquatic life site-specific objectives on January 21, 2003. The copper and nickel aquatic life site-specific objectives contained in the amended Basin Plan apply instead.

[c]Criteria are based on carcinogenicity of 10 (−6) risk.

[d]Criteria Maximum Concentration (CMC) equals the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time without deleterious effects. Criteria Continuous Concentration (CCC) equals the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects. µg/L equals micrograms per liter.

[e]Freshwater aquatic life criteria for metals are expressed as a function of total hardness (mg/L) in the water body. The equations are provided in matrix at paragraph (b)(2) of this section. Values displayed above in the matrix correspond to a total hardness of 100 mg/l.

[f]Freshwater aquatic life criteria for pentachlorophenol are expressed as a function of pH, and are calculated as follows: Values displayed above in the matrix correspond to a pH of 7.8. CMC = exp(1.005(pH)−4.869). CCC = exp(1.005(pH)−5.134).

[g]This criterion is based on Clean Water Act (CWA) 304(a) aquatic life criterion issued in 1980, and was issued in one of the following documents: Aldrin/Dieldrin (EPA 440/5-80-019), Chlordane (EPA 440/5-80-027), DDT (EPA 440/5-80-038), Endosulfan (EPA 440/5-80-046), Endrin (EPA 440/5-80-047), Heptachlor (440/5-80-052), Hexachlorocyclohexane (EPA 440/5-80-054), Silver (EPA 440/5-80-071). The Minimum Data Requirements and derivation procedures were different in the 1980 Guidelines than in the 1985 Guidelines. For example, a “CMC” derived using the 1980 Guidelines was derived to be used as an instantaneous maximum. If assessment is to be done using an averaging period, the values given should be divided by 2 to obtain a value that is more comparable to a CMC derived using the 1985 Guidelines.

[h]These totals simply sum the criteria in each column. For aquatic life, there are 23 priority toxic pollutants with some type of freshwater or saltwater, acute or chronic criteria. For human health, there are 92 priority toxic pollutants with either “water + organism” or

“organism only” criteria. Note that these totals count chromium as one pollutant even though the EPA has developed criteria based on two valence states. In the matrix, the EPA has assigned numbers 5a and 5b to the criteria for chromium to reflect the fact that the list of 126 priority pollutants includes only a single listing for chromium.

[i]Criteria for these metals are expressed as a function of the water-effect ratio, WER, as defined in paragraph (c) of this section. CMC = column B1 or C1 value × WER; CCC = column B2 or C2 value × WER.

[j]No criterion for protection of human health from consumption of aquatic organisms (excluding water) was presented in the 1980 criteria document or in the 1986 Quality Criteria for Water. Nevertheless, sufficient information was presented in the 1980 document to allow a calculation of a criterion, even though the results of such a calculation were not shown in the document.

[k]The CWA 304(a) criterion for asbestos is the MCL.

[l][Reserved].

[m]These freshwater and saltwater criteria for metals are expressed in terms of the dissolved fraction of the metal in the water column. Criterion values were calculated by using the EPA's Clean Water Act 304(a) guidance values (described in the total recoverable fraction) and then applying the conversion factors in §131.36(b)(1) and (2).

[n]The EPA is not promulgating human health criteria for these contaminants. However, permit authorities should address these contaminants in NPDES permit actions using the State's existing narrative criteria for toxics.

[o]These criteria were promulgated for specific waters in California in the National Toxics Rule (“NTR”), at §131.36. The specific waters to which the NTR criteria apply include: Waters of the State defined as bays or estuaries and waters of the State defined as inland, i.e., all surface waters of the State not ocean waters. These waters specifically include the San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta. This section does not apply instead of the NTR for this criterion.

[p]A criterion of 20 µg/l was promulgated for specific waters in California in the NTR and was promulgated in the total recoverable form. The specific waters to which the NTR criterion applies include: Waters of the San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta; and waters of Salt Slough, Mud Slough (north) and the San Joaquin River, Sack Dam to the mouth of the Merced River. This section does not apply instead of the NTR for this criterion. The State of California adopted and the EPA approved a site specific criterion for the San Joaquin River, mouth of Merced to Vernalis; therefore, this section does not apply to these waters.

[q]This criterion is expressed in the total recoverable form. This criterion was promulgated for specific waters in California in the NTR and was promulgated in the total recoverable form. The specific waters to which the NTR criterion applies include: Waters of the San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta; and waters of Salt Slough, Mud Slough (north) and the San Joaquin River, Sack Dam to Vernalis. This criterion does not apply instead of the NTR for these waters. This criterion applies to additional waters of the United States in the State of California pursuant to paragraph (c) of this section. The State of California adopted and the EPA approved a site-specific criterion for the Grassland Water District, San Luis National Wildlife Refuge, and the Los Banos State Wildlife Refuge; therefore, this criterion does not apply to these waters.

[r]These criteria were promulgated for specific waters in California in the NTR. The specific waters to which the NTR criteria apply include: Waters of the State defined as bays or estuaries including the Sacramento-San Joaquin Delta within California Regional Water

Board 5, but excluding the San Francisco Bay. This section does not apply instead of the NTR for these criteria.

[s]These criteria were promulgated for specific waters in California in the NTR. The specific waters to which the NTR criteria apply include: Waters of the Sacramento-San Joaquin Delta and waters of the State defined as inland (i.e., all surface waters of the State not bays or estuaries or ocean) that include a MUN use designation. This section does not apply instead of the NTR for these criteria.

[t]These criteria were promulgated for specific waters in California in the NTR. The specific waters to which the NTR criteria apply include: Waters of the State defined as bays and estuaries including San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta; and waters of the State defined as inland (i.e., all surface waters of the State not bays or estuaries or ocean) without a MUN use designation. This section does not apply instead of the NTR for these criteria.

[u]PCBs are a class of chemicals which include aroclors 1242, 1254, 1221, 1232, 1248, 1260, and 1016, CAS numbers 53469219, 11097691, 11104282, 11141165, 12672296, 11096825, and 12674112, respectively. The aquatic life criteria apply to the sum of this set of seven aroclors.

[v]This criterion applies to total PCBs, e.g., the sum of all congener or isomer or homolog or aroclor analyses.

[w]This criterion has been recalculated pursuant to the 1995 Updates: Water Quality Criteria Documents for the Protection of Aquatic Life in Ambient Water, Office of Water, EPA-820-B-96-001, September 1996. See also Great Lakes Water Quality Initiative Criteria Documents for the Protection of Aquatic Life in Ambient Water, Office of Water, EPA-80-B-95-004, March 1995.

[x]The State of California has adopted and the EPA has approved site specific criteria for the Sacramento River (and tributaries) above Hamilton City; therefore, these criteria do not apply to these waters.

[y]The State of California adopted and the EPA approved a site-specific criterion for New Alamo Creek from Old Alamo Creek to Ulatis Creek and for Ulatis Creek from Alamo Creek to Cache Slough; therefore, this criterion does not apply to these waters.

[z]The State of California adopted and the EPA approved a site-specific criterion for the Los Angeles River and its tributaries; therefore, this criterion does not apply to these waters.

General Notes To Table In Paragraph (b)(1)

1. The table in this paragraph (b)(1) lists all of the EPA's priority toxic pollutants whether or not criteria guidance are available. Blank spaces indicate the absence of national section 304(a) criteria guidance. Because of variations in chemical nomenclature systems, this listing of toxic pollutants does not duplicate the listing in appendix A to 40 CFR part 423—126 Priority Pollutants. The EPA has added the Chemical Abstracts Service (CAS) registry numbers, which provide a unique identification for each chemical.

2. The following chemicals have organoleptic-based criteria recommendations that are not included on this chart: zinc, 3-methyl-4-chlorophenol.

3. Freshwater and saltwater aquatic life criteria apply as specified in paragraph (c)(3) of this section.

(2) Factors for Calculating Metals Criteria. Final CMC and CCC values should be rounded to two significant figures.

(i) CMC = WER × (Acute Conversion Factor) × (exp{mA[1n (hardness)] + bA})

https://ecfr.io/Title-40/pt40.24.131#se40.24.131_138
Extracted by GlobalMSDS
17th September 2019

(ii) CCC = WER × (Chronic Conversion Factor) × (exp{mC[ln(hardness)] + bC})

(iii) Table 1 to paragraph (b)(2) of this section:

Metal	mA	bA	mC	bC
Cadmium	1.128	−3.6867	0.7852	−2.715
Copper	0.9422	−1.700	0.8545	−1.702
Chromium (III)	0.8190	3.688	0.8190	1.561
Lead	1.273	−1.460	1.273	−4.705
Nickel	0.8460	2.255	0.8460	0.0584
Silver	1.72	−6.52		
Zinc	0.8473	0.884	0.8473	0.884

Note to Table 1: The term “exp” represents the base e exponential function.

(iv) Table 2 to paragraph (b)(2) of this section:

Metal	Conversion factor (CF) for freshwater acute criteria	CF for freshwater chronic criteria	CF for saltwater acute criteria	CF[a] for saltwater chronic criteria
Antimony	([d])	([d])	([d])	([d])
Arsenic	1.000	1.000	1.000	1.000
Beryllium	([d])	([d])	([d])	([d])
Cadmium	[b]0.944	[b]0.909	0.994	0.994
Chromium (III)	0.316	0.860	([d])	([d])
Chromium (VI)	0.982	0.962	0.993	0.993
Copper	0.960	0.960	0.83	0.83
Lead	[b]0.791	[b]0.791	0.951	0.951
Mercury				
Nickel	0.998	0.997	0.990	0.990
Selenium		([c])	0.998	0.998
Silver	0.85	([d])	0.85	([d])
Thallium	([d])	([d])	([d])	([d])
Zinc	0.978	0.986	0.946	0.946

Footnotes to table 2 of paragraph(b)(2):

[a]Conversion Factors for chronic marine criteria are not currently available. Conversion Factors for acute marine criteria have been used for both acute and chronic marine criteria.

[b]Conversion Factors for these pollutants in freshwater are hardness dependent. CFs are based on a hardness of 100 mg/l as calcium carbonate (CaCO3). Other hardness can be used; CFs should be recalculated using the equations in table 3 to paragraph (b)(2) of this section.

[c]Bioaccumulative compound and inappropriate to adjust to percent dissolved.

[d]EPA has not published an aquatic life criterion value.

Note to table 2 of paragraph (b)(2): The term “Conversion Factor” represents the recommended conversion factor for converting a metal criterion expressed as the total recoverable fraction in the water column to a criterion expressed as the dissolved fraction in the water column. See “Office of Water Policy and Technical Guidance on Interpretation and Implementation of Aquatic Life Metals Criteria”, October 1, 1993, by Martha G. Prothro, Acting Assistant Administrator for Water available from Water Resource Center, USEPA, Mailcode RC4100, M Street SW, Washington, DC 20460 and the note to §131.36(b)(1).

(v) Table 3 to paragraph (b)(2) of this section:

	Acute	Chronic
Cadmium	CF = 1.136672—[(ln {hardness})(0.041838)]	CF = 1.101672—[(ln {hardness})(0.041838)]
Lead	CF = 1.46203—[(ln {hardness})(0.145712)]	CF = 1.46203—[(ln {hardness})(0.145712)]

(c) Applicability. (1) The criteria in paragraph (b) of this section apply to the State's designated uses cited in paragraph (d) of this section and apply concurrently with any criteria adopted by the State, except when State regulations contain criteria which are more stringent for a particular parameter and use, or except as provided in footnotes p, q, and x to the table in paragraph (b)(1) of this section.

(2) The criteria established in this section are subject to the State's general rules of applicability in the same way and to the same extent as are other Federally-adopted and State-adopted numeric toxics criteria when applied to the same use classifications including mixing zones, and low flow values below which numeric standards can be exceeded in flowing fresh waters.

(i) For all waters with mixing zone regulations or implementation procedures, the criteria apply at the appropriate locations within or at the boundary of the mixing zones; otherwise the criteria apply throughout the water body including at the point of discharge into the water body.

(ii) The State shall not use a low flow value below which numeric standards can be exceeded that is less stringent than the flows in Table 4 to paragraph (c)(2) of this section for streams and rivers.

(iii) Table 4 to paragraph (c)(2) of this section:

Criteria	Design flow
Aquatic Life Acute Criteria (CMC)	1 Q 10 or 1 B 3
Aquatic Life Chronic Criteria (CCC)	7 Q 10 or 4 B 3
Human Health Criteria	Harmonic Mean Flow

Note to table 4 of paragraph (c)(2): 1. CMC (Criteria Maximum Concentration) is the water quality criteria to protect against acute effects in aquatic life and is the highest instream concentration of a priority toxic pollutant consisting of a short-term average not to be exceeded more than once every three years on the average.

2. CCC (Continuous Criteria Concentration) is the water quality criteria to protect against chronic effects in aquatic life and is the highest in stream concentration of a priority toxic pollutant consisting of a 4-day average not to be exceeded more than once every three years on the average.

3. 1 Q 10 is the lowest one day flow with an average recurrence frequency of once in 10 years determined hydrologically.

4. 1 B 3 is biologically based and indicates an allowable exceedence of once every 3 years. It is determined by EPA's computerized method (DFLOW model).

5. 7 Q 10 is the lowest average 7 consecutive day low flow with an average recurrence frequency of once in 10 years determined hydrologically.

6. 4 B 3 is biologically based and indicates an allowable exceedence for 4 consecutive days once every 3 years. It is determined by EPA's computerized method (DFLOW model).

(iv) If the State does not have such a low flow value below which numeric standards do not apply, then the criteria included in paragraph (d) of this section apply at all flows.

(v) If the CMC short-term averaging period, the CCC four-day averaging period, or once in three-year frequency is inappropriate for a criterion or the site to which a criterion applies, the State may apply to EPA for approval of an alternative averaging period, frequency, and related design flow. The State must submit to EPA the bases for any alternative averaging period, frequency, and related design flow. Before approving any change, EPA will publish for public comment, a document proposing the change.

(3) The freshwater and saltwater aquatic life criteria in the matrix in paragraph (b)(1) of this section apply as follows:

(i) For waters in which the salinity is equal to or less than 1 part per thousand 95% or more of the time, the applicable criteria are the freshwater criteria in Column B;

(ii) For waters in which the salinity is equal to or greater than 10 parts per thousand 95% or more of the time, the applicable criteria are the saltwater criteria in Column C except for selenium in the San Francisco Bay estuary where the applicable criteria are the freshwater criteria in Column B (refer to footnotes p and q to the table in paragraph (b)(1) of this section); and

(iii) For waters in which the salinity is between 1 and 10 parts per thousand as defined in paragraphs (c)(3)(i) and (ii) of this section, the applicable criteria are the more stringent of the freshwater or saltwater criteria. However, the Regional Administrator may approve the use of the alternative freshwater or saltwater criteria if scientifically defensible information and data demonstrate that on a site-specific basis the biology of the water body is dominated by freshwater aquatic life and that freshwater criteria are more appropriate; or conversely, the biology of the water body is dominated by saltwater aquatic life and that saltwater criteria are more appropriate. Before approving any change, EPA will publish for public comment a document proposing the change.

(4) Application of metals criteria. (i) For purposes of calculating freshwater aquatic life criteria for metals from the equations in paragraph (b)(2) of this section, for waters with a hardness of 400 mg/l or less as calcium carbonate, the actual ambient hardness of the surface water shall be used in those equations. For waters with a hardness of over 400 mg/l as calcium carbonate, a hardness of 400 mg/l as calcium carbonate shall be used with a default Water-Effect Ratio (WER) of 1, or the actual hardness of the ambient surface water shall be used with a WER. The same provisions apply for calculating the metals criteria for the comparisons provided for in paragraph (c)(3)(iii) of this section.

(ii) The hardness values used shall be consistent with the design discharge conditions established in paragraph (c)(2) of this section for design flows and mixing zones.

(iii) The criteria for metals (compounds #1—#13 in the table in paragraph (b)(1) of this section) are expressed as dissolved except where otherwise noted. For purposes of calculating aquatic life criteria for metals from the equations in footnote i to the table in paragraph (b)(1) of this section and the equations in paragraph (b)(2) of this section, the water effect ratio is generally computed as a specific pollutant's acute or chronic toxicity value measured in water from the site covered by the standard, divided by the respective acute or chronic toxicity value in laboratory dilution water. To use a water effect ratio other than the default of 1, the WER must be determined as set forth in Interim Guidance on Determination and Use of Water Effect Ratios, U.S. EPA Office of Water, EPA-823-B-94-001, February 1994, or alternatively, other scientifically defensible methods adopted by the State as part of its water quality standards program and approved by EPA. For calculation of criteria using site-specific values for both the hardness and the water effect ratio, the hardness used in the equations in paragraph (b)(2) of this section must be determined as required in paragraph (c)(4)(ii) of this section. Water hardness must be calculated from the measured calcium and magnesium ions present, and the ratio of calcium to magnesium should be approximately the same in standard laboratory toxicity testing water as in the site water.

(d)(1) Except as specified in paragraph (d)(3) of this section, all waters assigned any aquatic life or human health use classifications in the Water Quality Control Plans for the various Basins of the State ("Basin Plans") adopted by the California State Water Resources Control Board ("SWRCB"), except for ocean waters covered by the Water Quality Control Plan for Ocean Waters of California ("Ocean Plan") adopted by the SWRCB with resolution Number 90-27 on March 22, 1990, are subject to the criteria in paragraph (d)(2) of this section, without exception. These criteria apply to waters identified in the Basin Plans. More particularly, these criteria apply to waters identified in the Basin Plan chapters designating beneficial uses for waters within the region. Although the State has adopted several use designations for each of these waters, for purposes of this action, the specific standards to be applied in paragraph (d)(2) of this section are based on the presence in all waters of some aquatic life designation and the presence or absence of the MUN use designation (municipal and domestic supply). (See Basin Plans for more detailed use definitions.)

(2) The criteria from the table in paragraph (b)(1) of this section apply to the water and use classifications defined in paragraph (d)(1) of this section as follows:

Water and use classification	Applicable criteria
(i) All inland waters of the United States or enclosed bays and estuaries that are waters of the United States that include a MUN use designation	(A) Columns B1 and B2—all pollutants (B) Columns C1 and C2—all pollutants (C) Column D1—all pollutants
(ii) All inland waters of the United States or enclosed bays and estuaries that are waters of the United States that do not include a MUN use designation	(A) Columns B1 and B2—all pollutants (B) Columns C1 and C2—all pollutants (C) Column D2—all pollutants

(3) Nothing in this section is intended to apply instead of specific criteria, including specific criteria for the San Francisco Bay estuary, promulgated for California in the National Toxics Rule at §131.36.

(4) The human health criteria shall be applied at the State-adopted 10 (−6) risk level.

(5) Nothing in this section applies to waters located in Indian Country.

(e) Schedules of compliance. (1) It is presumed that new and existing point source dischargers will promptly comply with any new or more restrictive water quality-based effluent limitations ("WQBELs") based on the water quality criteria set forth in this section.

(2) When a permit issued on or after May 18, 2000 to a new discharger contains a WQBEL based on water quality criteria set forth in paragraph (b) of this section, the permittee shall comply with such WQBEL upon the commencement of the discharge. A new discharger is defined as any building, structure, facility, or installation from which there is or may be a "discharge of pollutants" (as defined in 40 CFR 122.2) to the State of

California's inland surface waters or enclosed bays and estuaries, the construction of which commences after May 18, 2000.

(3) Where an existing discharger reasonably believes that it will be infeasible to promptly comply with a new or more restrictive WQBEL based on the water quality criteria set forth in this section, the discharger may request approval from the permit issuing authority for a schedule of compliance.

(4) A compliance schedule shall require compliance with WQBELs based on water quality criteria set forth in paragraph (b) of this section as soon as possible, taking into account the dischargers' technical ability to achieve compliance with such WQBEL.

(5) If the schedule of compliance exceeds one year from the date of permit issuance, reissuance or modification, the schedule shall set forth interim requirements and dates for their achievement. The dates of completion between each requirement may not exceed one year. If the time necessary for completion of any requirement is more than one year and is not readily divisible into stages for completion, the permit shall require, at a minimum, specified dates for annual submission of progress reports on the status of interim requirements.

(6) In no event shall the permit issuing authority approve a schedule of compliance for a point source discharge which exceeds five years from the date of permit issuance, reissuance, or modification, whichever is sooner. Where shorter schedules of compliance are prescribed or schedules of compliance are prohibited by law, those provisions shall govern.

(7) If a schedule of compliance exceeds the term of a permit, interim permit limits effective during the permit shall be included in the permit and addressed in the permit's fact sheet or statement of basis. The administrative record for the permit shall reflect final permit limits and final compliance dates. Final compliance dates for final permit limits, which do not occur during the term of the permit, must occur within five years from the date of issuance, reissuance or modification of the permit which initiates the compliance schedule. Where shorter schedules of compliance are prescribed or schedules of compliance are prohibited by law, those provisions shall govern.

(8) The provisions in this paragraph (e), Schedules of compliance, shall expire on May 18, 2005.

[65 FR 31711, May 18, 2000, as amended at 66 FR 9961, Feb. 13, 2001; 68 FR 62747, Nov. 6, 2003; 78 FR 20255, Apr. 4, 2013; 83 FR 52166, Oct. 16, 2018]