

**Environmental Protection Agency**

**§ 131.36**

Coyote Creek .....	Class II
Deerhorn Creek .....	Class III
Dick Creek .....	Class III
Dry Creek .....	Class I
Empire Creek .....	Class III
Faye Creek .....	Class I
Forty Mile Creek .....	Class III
Gibson Creek .....	Class I
Gold Creek .....	Class II
Granite Creek .....	Class II
Grizzly Creek .....	Class III
Haley Creek .....	Class III
Hall Creek .....	Class II
Hall Creek, West Fork .....	Class I
Iron Creek .....	Class III
Jack Creek .....	Class III
Jerred Creek .....	Class I
Joe Moses Creek .....	Class III
John Tom Creek .....	Class III
Jones Creek .....	Class I
Kartar Creek .....	Class III
Kincaid Creek .....	Class III
King Creek .....	Class III
Klondyke Creek .....	Class I
Lime Creek .....	Class III
Little Jim Creek .....	Class III
Little Nespelem .....	Class II
Louie Creek .....	Class III
Lynx Creek .....	Class II
Manila Creek .....	Class III
McAllister Creek .....	Class III
Meadow Creek .....	Class III
Mill Creek .....	Class II
Mission Creek .....	Class III
Nespelem River .....	Class II
Nez Perce Creek .....	Class III
Nine Mile Creek .....	Class II
Nineteen Mile Creek .....	Class III
No Name Creek .....	Class II
North Nanamkin Creek .....	Class III
North Star Creek .....	Class III
Okanogan River from Reserva- tion north boundary to Colum- bia River .....	Class II
Olds Creek .....	Class I
Omak Creek .....	Class II
Onion Creek .....	Class II
Parmenter Creek .....	Class III
Peel Creek .....	Class III
Peter Dan Creek .....	Class III
Rock Creek .....	Class I
San Poil River .....	Class I
Sanpoil, River West Fork .....	Class II
Seventeen Mile Creek .....	Class III
Silver Creek .....	Class III
Sitdown Creek .....	Class III
Six Mile Creek .....	Class III
South Nanamkin Creek .....	Class III
Spring Creek .....	Class III
Stapaloo Creek .....	Class III
Stepstone Creek .....	Class III

Stranger Creek .....	Class II
Strawberry Creek .....	Class III
Swimptkin Creek .....	Class III
Three Forks Creek .....	Class I
Three Mile Creek .....	Class III
Thirteen Mile Creek .....	Class II
Thirty Mile Creek .....	Class II
Trail Creek .....	Class III
Twentyfive Mile Creek .....	Class III
Twentyone Mile Creek .....	Class III
Twentythree Mile Creek .....	Class III
Wannacot Creek .....	Class III
Wells Creek .....	Class I
Whitelaw Creek .....	Class III
Wilmont Creek .....	Class II
(2) Lakes:	
Apex Lake .....	LC
Big Goose Lake .....	LC
Bourgeau Lake .....	LC
Buffalo Lake .....	LC
Cody Lake .....	LC
Crawfish Lakes .....	LC
Camille Lake .....	LC
Elbow Lake .....	LC
Fish Lake .....	LC
Gold Lake .....	LC
Great Western Lake .....	LC
Johnson Lake .....	LC
LaFleur Lake .....	LC
Little Goose Lake .....	LC
Little Owhi Lake .....	LC
McGinnis Lake .....	LC
Nicholas Lake .....	LC
Omak Lake .....	SRW
Owhi Lake .....	SRW
Penley Lake .....	SRW
Rebecca Lake .....	LC
Round Lake .....	LC
Simpson Lake .....	LC
Soap Lake .....	LC
Sugar Lake .....	LC
Summit Lake .....	LC
Twin Lakes .....	SRW

[54 FR 28625, July 6, 1989]

**§ 131.36 Toxics criteria for those states not complying with Clean Water Act section 303(c)(2)(B).**

(a) *Scope.* This section is not a general promulgation of the section 304(a) criteria for priority toxic pollutants but is restricted to specific pollutants in specific States.

(b)(1) EPA's Section 304(a) criteria for Priority Toxic Pollutants.

A		B Freshwater		C Saltwater		D Human Health (10 <sup>-6</sup> risk for carcinogens) For consumption of:		
								Water & Organisms (µg/L)
#	Compound	CAS Number	Criterion Maximum Conc. <sup>d</sup> (µg/L)	Criterion Continuous Conc. <sup>d</sup> (µg/L)	Criterion Maximum Conc. <sup>d</sup> (µg/L)	Criterion Continuous Conc. <sup>d</sup> (µg/L)	D1	D2
			B1	B2	C1	C2		
1	Antimony	7440360	360 m	190 m	69 m	36 m	14 a	4300 a
2	Arsenic	7440382	360 m	190 m	69 m	36 m	0.018 abc	0.14 abc
3	Beryllium	7440417	3.7 e	1.0 e	42 m	9.3 m	n	n
4	Cadmium	7440439	3.7 e	1.0 e	42 m	9.3 m	n	n
5a	Chromium (III)	16065831	15 m	10 m	1100 m	50 m	n	n
b	Chromium (VI)	18540299	15 m	10 m	1100 m	50 m	n	n
6	Copper	7440508	17 e	11 e	2.4 m	2.4 m	n	n
7	Lead	7439921	65 e	2.5 e	2.10 m	8.1 m	n	n
8	Mercury	7439976	2.1 m	0.012 ip	1.8 m	0.025 jp	0.14	0.15
9	Nickel	7440020	1400 e	160 e	74 m	8.2 m	610 a	4600 a
10	Selenium	7782492	20 p	5 p	290 m	71 m	n	n
11	Silver	7440224	3.4 e	.....	1.9 m	.....	.....	.....
12	Thallium	7440280	.....	.....	.....	.....	1.7 a	6.3 a
13	Zinc	7440666	110 e	100 e	90 m	81 m	700 a	220000 aj
14	Cyanide	57125	22	5.2	1	1	7,000,000 fibers/L k	.....
15	Asbestos	1332214	.....	.....	.....	.....	0.000000013 c	0.000000014 c
16	2,3,7,8-TCDD (Dioxin)	1746016	.....	.....	.....	.....	320	780
17	Acrolein	107028	.....	.....	.....	.....	0.059 ac	0.66 ac
18	Acrylonitrile	107131	.....	.....	.....	.....	1.2 ac	71 ac
19	Benzene	71432	.....	.....	.....	.....	4.3 ac	360 ac
20	Bromoform	75252	.....	.....	.....	.....	0.25 ac	4.4 ac
21	Carbon Tetrachloride	56235	.....	.....	.....	.....	680 a	21000 aj
22	Chlorobenzene	108907	.....	.....	.....	.....	0.41 ac	34 ac
23	Chlorodibromomethane	124481	.....	.....	.....	.....	.....	.....
24	Chloroethane	75003	.....	.....	.....	.....	.....	.....
25	2-Chloroethylvinyl Ether	110758	.....	.....	.....	.....	5.7 ac	470 ac
26	Chloroform	67663	.....	.....	.....	.....	0.27 ac	22 ac
27	Dichlorobromomethane	75274	.....	.....	.....	.....	.....	.....
28	1,1-Dichloroethane	75343	.....	.....	.....	.....	.....	.....
29	1,2-Dichloroethane	107062	.....	.....	.....	.....	0.38 ac	99 ac
30	1,1-Dichloroethylene	75354	.....	.....	.....	.....	0.057 ac	3.2 ac
31	1,2-Dichloropropane	78875	.....	.....	.....	.....	.....	.....
32	1,3-Dichloropropylene	542756	.....	.....	.....	.....	10 a	1700 a



A		B		C		D		
		Freshwater		Saltwater		Human Health (10 <sup>-6</sup> risk for carcinogens) For consumption of:		
#	Compound	CAS Number	Criterion Maximum Conc. <sup>d</sup> (µg/L)	Criterion Continuous Conc. <sup>d</sup> (µg/L)	Criterion Maximum Conc. <sup>d</sup> (µg/L)	Criterion Continuous Conc. <sup>d</sup> (µg/L)	Water & Organisms (µg/L)	Organisms Only (µg/L)
			B1	B2	C1	C2	D1	D2
70	Butylbenzyl Phthalate .....	85687	.....	.....	.....	.....	.....	.....
71	2-Chloronaphthalene .....	91587	.....	.....	.....	.....	.....	.....
72	4-Chlorophenyl Phenyl Ether .....	7005723	.....	.....	.....	.....	.....	.....
73	Chrysene .....	218019	.....	.....	.....	.....	0.0028 c	0.031 c
74	Dibenzo(a,h)Anthracene .....	53703	.....	.....	.....	.....	0.0028 c	0.031 c
75	1,2-Dichlorobenzene .....	95501	.....	.....	.....	.....	2700 a	17000 a
76	1,3-Dichlorobenzene .....	541731	.....	.....	.....	.....	400	2600
77	1,4-Dichlorobenzene .....	106467	.....	.....	.....	.....	400	2600
78	3,3'-Dichlorobenzidine .....	91941	.....	.....	.....	.....	0.04 ac	0.077 ac
79	Diethyl Phthalate .....	84662	.....	.....	.....	.....	23000 a	120000 a
80	Dimethyl Phthalate .....	131113	.....	.....	.....	.....	313000	2900000
81	Di-n-Butyl Phthalate .....	84742	.....	.....	.....	.....	2700 a	12000 a
82	2,4-Dinitrotoluene .....	121142	.....	.....	.....	.....	0.11 c	9.1 c
83	2,6-Dinitrotoluene .....	606202	.....	.....	.....	.....	.....	.....
84	Di-n-Octyl Phthalate .....	117840	.....	.....	.....	.....	.....	.....
85	1,2-Diphenylhydrazine .....	122667	.....	.....	.....	.....	.....	.....
86	Fluoranthene .....	206440	.....	.....	.....	.....	0.040 ac	0.54 ac
87	Fluorene .....	86737	.....	.....	.....	.....	300 a	370 a
88	Hexachlorobenzene .....	118741	.....	.....	.....	.....	1300 a	14000 a
89	Hexachlorobutadiene .....	87683	.....	.....	.....	.....	0.00075 ac	0.00077 ac
90	Hexachlorocyclopentadiene .....	77474	.....	.....	.....	.....	0.44 ac	50 ac
91	Hexachloroethane .....	67721	.....	.....	.....	.....	.....	.....
92	Indeno(1,2,3-cd)Pyrene .....	193395	.....	.....	.....	.....	240 a	17000 aj
93	Isophorone .....	78591	.....	.....	.....	.....	1.9 ac	8.9 ac
94	Naphthalene .....	91203	.....	.....	.....	.....	0.0028 c	0.031 c
95	Nitrobenzene .....	98953	.....	.....	.....	.....	8.4 ac	600 ac
96	N-Nitrosodimethylamine .....	62759	.....	.....	.....	.....	.....	.....
97	N-Nitrosodi-n-Propyl- amine .....	621647	.....	.....	.....	.....	17 a	1900 aj
98	N-Nitrosodiphenylamine .....	86306	.....	.....	.....	.....	0.00069 ac	8.1 ac
99	Phenanthrene .....	85018	.....	.....	.....	.....	5.0 ac	16 ac



## FOOTNOTES

a. Criteria revised to reflect current agency  $q_1^*$  or RfD, as contained in the Integrated Risk Information System (IRIS). The fish tissue bioconcentration factor (BCF) from the 1980 criteria documents was retained in all cases.

b. The criteria refers to the inorganic form only.

c. Criteria in the matrix based on carcinogenicity ( $10^{-6}$  risk). For a risk level of  $10^{-5}$ , move the decimal point in the matrix value one place to the right.

d. Criteria Maximum Concentration (CMC) = the highest concentration of a pollutant to which aquatic life can be exposed for a short period of time (1-hour average) without deleterious effects. Criteria Continuous Concentration (CCC) = the highest concentration of a pollutant to which aquatic life can be exposed for an extended period of time (4 days) without deleterious effects.  $\mu\text{g/L}$  = micrograms per liter.

e. Freshwater aquatic life criteria for these metals are expressed as a function of total hardness (mg/L as  $\text{CaCO}_3$ ), the pollutant's water effect ratio (WER) as defined in § 131.36(c) and multiplied by an appropriate dissolved conversion factor as defined in § 131.36(b)(2). For comparative purposes, the values displayed in this matrix are shown as dissolved metal and correspond to a total hardness of 100 mg/L and a water effect ratio of 1.0.

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.

$$\text{CMC} = \exp(1.005(\text{pH}) - 4.830)$$

$$\text{CCC} = \exp(1.005(\text{pH}) - 5.290)$$

g. Aquatic life criteria for these compounds were issued in 1980 utilizing the 1980 Guidelines for criteria development. The acute values shown are final acute values (FAV) which by the 1980 Guidelines are instantaneous values as contrasted with a CMC which is a one-hour average.

h. These totals simply sum the criteria in each column. For aquatic life, there are 31 priority toxic pollutants with some type of freshwater or saltwater, acute or chronic criteria. For human health, there are 85 priority toxic pollutants with either "water + fish" or "fish only" criteria. Note that these totals count chromium as one pollutant even though EPA has developed criteria based on two valence states. In the matrix, EPA has assigned numbers 5a and 5b to the criteria for chromium to reflect the fact that the list of 126 priority toxic pollutants includes only a single listing for chromium.

i. If the CCC for total mercury exceeds  $0.012 \mu\text{g/l}$  more than once in a 3-year period in the ambient water, the edible portion of aquatic species of concern must be analyzed

to determine whether the concentration of methyl mercury exceeds the FDA action level (1.0 mg/kg). If the FDA action level is exceeded, the State must notify the appropriate EPA Regional Administrator, initiate a revision of its mercury criterion in its water quality standards so as to protect designated uses, and take other appropriate action such as issuance of a fish consumption advisory for the affected area.

j. No criteria 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 criterion for asbestos is the MCL (56 FR 3526, January 30, 1991).

l. [Reserved: This letter not used as a footnote.]

m. Criteria for these metals are expressed as a function of the water effect ratio, WER, as defined in 40 CFR 131.36(c).

$$\text{CMC} = \text{column B1 or C1 value} \times \text{WER}$$

$$\text{CCC} = \text{column B2 or C2 value} \times \text{WER}$$

n. EPA is not promulgating human health criteria for this contaminant. However, permit authorities should address this contaminant in NPDES permit actions using the State's existing narrative criteria for toxics.

o. [Reserved: This letter not used as a footnote.]

p. Criterion expressed as total recoverable.

q. This criterion applies to total PCBs (*e.g.*, the sum of all congener or isomer or homolog or Aroclor analyses).

## GENERAL NOTES

1. This chart lists all of EPA's priority toxic pollutants whether or not criteria recommendations are available. Blank spaces indicate the absence of criteria recommendations. Because of variations in chemical nomenclature systems, this listing of toxic pollutants does not duplicate the listing in Appendix A of 40 CFR Part 423. 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 (for reasons which are discussed in the preamble): copper, zinc, chlorobenzene, 2-chlorophenol, 2,4-dichlorophenol, acenaphthene, 2,4-dimethylphenol, 3-methyl-4-chlorophenol, hexachlorocyclopentadiene, pentachlorophenol, phenol.

3. For purposes of this rulemaking, freshwater criteria and saltwater criteria apply as specified in 40 CFR 131.36(c).

NOTE TO PARAGRAPH (B)(1): On April 14, 1995, the Environmental Protection Agency

**Environmental Protection Agency**

**§ 131.36**

issued a stay of certain criteria in paragraph (b)(1) of this section as follows: the criteria in columns B and C for arsenic, cadmium, chromium (VI), copper, lead, nickel, silver, and zinc; the criteria in B1 and C1 for mercury; the criteria in column B for chromium (III); and the criteria in column C for selenium. The stay remains in effect until further notice.

(2) Factors for Calculating Hardness-Dependent, Freshwater Metals Criteria

$$CMC = WER \exp \{ m_A [\ln(\text{hardness})] + b_A \} \times \text{Acute Conversion Factor}$$

$$CCC = WER \exp \{ m_C [\ln(\text{hardness})] + b_C \} \times \text{Chronic Conversion Factor}$$

Final CMC and CCC values should be rounded to two significant figures.

Metal	m <sub>A</sub>	b <sub>A</sub>	m <sub>C</sub>	b <sub>C</sub>	Freshwater conversion factors	
					Acute	Chronic
Cadmium .....	1.128	-3.828	0.7852	-3.490	<sup>a</sup> 0.944	<sup>a</sup> 0.909
Chromium (III) .....	0.8190	3.688	0.8190	1.561	0.316	0.860
Copper .....	0.9422	-1.464	0.8545	-1.465	0.960	0.960
Lead .....	1.273	-1.460	1.273	-4.705	<sup>a</sup> 0.791	<sup>a</sup> 0.791
Nickel .....	0.8460	3.3612	0.8460	1.1645	0.998	0.997
Silver .....	1.72	-6.52	<sup>b</sup> N/A	<sup>b</sup> N/A	0.85	<sup>b</sup> N/A
Zinc .....	0.8473	0.8604	0.8473	0.7614	0.978	0.986

Note to table: The term "exp" represents the base e exponential function.  
 Footnotes to table:  
<sup>a</sup>The freshwater conversion factors (CF) for cadmium and lead are hardness-dependent and can be calculated for any hardness [see limitations in § 131.36(c)(4)] using the following equations:  
 Cadmium  
 Acute: CF=1.136672—[(ln hardness)(0.041838)]  
 Chronic: CF=1.101672—[(ln hardness)(0.041838)]  
 Lead (Acute and Chronic): CF = 1.46203—[(ln hardness)(0.145712)]  
<sup>b</sup>No chronic criteria are available for silver.

(c) *Applicability.* (1) The criteria in paragraph (b) of this section apply to the States' designated uses cited in paragraph (d) of this section and supersede any criteria adopted by the State, except when State regulations contain criteria which are more stringent for a particular use in which case the State's criteria will continue to apply.

(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 the other 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 waterbody including at the end of any discharge pipe, canal or other discharge point.

(ii) A State shall not use a low flow value below which numeric standards can be exceeded that is less stringent than the following for waters suitable for the establishment of low flow return frequencies (i.e., streams and rivers):

AQUATIC LIFE	
Acute criteria (CMC)	1 Q 10 or 1 B 3
Chronic criteria (CCC)	7 Q 10 or 4 B 3
HUMAN HEALTH	
Non-carcinogens	30 Q 5

Carcinogens Harmonic mean flow

Where:  
 CMC—criteria maximum concentration—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 one-hour average not to be exceeded more than once every three years on the average;  
 CCC—criteria continuous concentration—the water quality criteria to protect against chronic effects in aquatic life is the highest instream 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;  
 1 Q 10 is the lowest one day flow with an average recurrence frequency of once in 10 years determined hydrologically;  
 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);  
 7 Q 10 is the lowest average 7 consecutive day low flow with an average recurrence frequency of once in 10 years determined hydrologically;  
 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);  
 30 Q 5 is the lowest average 30 consecutive day low flow with an average recurrence frequency of once in 5 years determined hydrologically; and the harmonic mean

§ 131.36

40 CFR Ch. I (7-1-03 Edition)

flow is a long term mean flow value calculated by dividing the number of daily flows analyzed by the sum of the reciprocals of those daily flows.

(iii) If a State does not have such a low flow value for numeric standards compliance, then none shall apply and the criteria included in paragraph (d) of this section herein apply at all flows.

(3) The aquatic life criteria in the matrix in paragraph (b) 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; 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 waterbody is dominated by freshwater aquatic life and that freshwater criteria are more appropriate; or conversely, the biology of the waterbody is dominated by saltwater aquatic life and that saltwater criteria are more appropriate.

(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, the minimum hardness allowed for use in those equations shall not be less than 25 mg/l, as calcium carbonate, even if the actual ambient hardness is less than 25 mg/l as calcium carbonate. The maximum hardness value for use in those equations shall not exceed 400 mg/l as calcium carbonate, even if the actual ambient hardness is greater than 400 mg/l as calcium carbonate. 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 flows and mixing zones.

(iii) Except where otherwise noted, the criteria for metals (compounds #2, #4-# 11, and #13, in paragraph (b) of this section) are expressed as dissolved metal. For purposes of calculating aquatic life criteria for metals from the equations in footnote m. in the criteria matrix in paragraph (b)(1) of this section and the equations in paragraphs (b)(2) of this section, the water-effect ratio is computed as a specific pollutant's acute or chronic toxicity values measured in water from the site covered by the standard, divided by the respective acute or chronic toxicity value in laboratory dilution water.

(d) *Criteria for Specific Jurisdictions—*  
 (1) *Rhode Island, EPA Region 1.* (i) All waters assigned to the following use classifications in the Water Quality Regulations for Water Pollution Control adopted under Chapters 46-12, 42-17.1, and 42-35 of the General Laws of Rhode Island are subject to the criteria in paragraph (d)(1)(ii) of this section, without exception:

6.21 Freshwater	6.22 Saltwater:
Class A .....	Class SA
Class B .....	Class SB
Class C .....	Class SC

(ii) The following criteria from the matrix in paragraph (b)(1) of this section apply to the use classifications identified in paragraph (d)(1)(i) of this section:

Use classification	Applicable criteria
Class A .....	These classifications are assigned the criteria in Column D1—#2, 68 Each of these classifications is assigned the criteria in: Column D2—#2, 68
Class B waters where water supply use is designated	
Class B waters where water supply use is not designated.	
Class C;	
Class SA; Class SB; Class SC	

(iii) The human health criteria shall be applied at the 10<sup>-5</sup> risk level, consistent with the State policy. To determine appropriate value for carcinogens, see footnote c in the criteria matrix in paragraph (b)(1) of this section.

**Environmental Protection Agency**

**§ 131.36**

(2) *Vermont, EPA Region 1.* (i) All waters assigned to the following use classifications in the Vermont Water Quality Standards adopted under the authority of the Vermont Water Pollution Control Act (10 V.S.A., Chapter 47) are subject to the criteria in paragraph (d)(2)(ii) of this section, without exception:

Class A  
Class B  
Class C

(ii) The following criteria from the matrix in paragraph (b)(1) of this section apply to the use classifications identified in paragraph (d)(2)(i) of this section:

Use classification	Applicable criteria
1. Classes A1, A2, B1, B2, B3 .....	These classification are assigned the criterion in: Column B2—#105.

(iii) The human health criteria shall be applied at the State-proposed 10<sup>-6</sup> risk level.

(3) *New Jersey, EPA Region 2.* (i) All waters assigned to the following use classifications in the New Jersey Administrative Code (N.J.A.C.) 7:9-4.1 et seq., Surface Water Quality Standards, are subject to the criteria in paragraph (d)(3)(ii) of this section, without exception.

N.J.A.C. 7:9-4.12(e): Class SE2  
N.J.A.C. 7:9-4.12(f): Class SE3  
N.J.A.C. 7:9-4.12(g): Class SC  
N.J.A.C. 7:9-4.13(a): Delaware River Zones 1C, 1D, and 1E  
N.J.A.C. 7:9-4.13(b): Delaware River Zone 2  
N.J.A.C. 7:9-4.13(c): Delaware River Zone 3  
N.J.A.C. 7:9-4.13(d): Delaware River Zone 4  
N.J.A.C. 7:9-4.13(e): Delaware River Zone 5  
N.J.A.C. 7:9-4.13(f): Delaware River Zone 6

(ii) The following criteria from the matrix in paragraph (b)(1) of this section apply to the use classifications identified in paragraph (d)(3)(i) of this section:

N.J.A.C. 7:9-4.12(b): Class PL  
N.J.A.C. 7:9-4.12(c): Class FW2  
N.J.A.C. 7:9-4.12(d): Class SE1

Use classification	Applicable criteria
1. Freshwater Pinelands, FW2 .....	These classifications are each assigned the criteria in: i. Column B1—#2, 4, 5a, 5b, 6-11, 13. ii. Column B2—#2, 4, 5a, 5b, 6-10, 13. iii. Column D1— #125b at a 10 <sup>-6</sup> risk level. iv. Column D2—#125b at a 10 <sup>-6</sup> risk level. v. Column D2—#23, 30, 37, 42, 87, 89, 93 and 105 at a 10 <sup>-5</sup> risk level.
2. PL (Saline Water Pinelands), SE1, SE2, SE3, SC, Delaware Bay Zone 6.	These classifications are each assigned the criteria in: i. Column C1—#2, 4, 5b, 6-11, 13. ii. Column C2—#2, 4, 5b, 6-10, 13. iii. Column D1— #125b at a 10 <sup>-6</sup> risk level. iv. Column D2—#125b at a 10 <sup>-6</sup> risk level. v. Column D2—#23, 30, 37, 42, 87, 89, 93 and 105 at a 10 <sup>-5</sup> risk level.
3. Delaware River Zones 1C, 1D, 1E, 2, 3, 4, and 5 .....	i. Column B1—none. ii. Column B2—none. iii. Column D1—none. iv. Column D2—none.
4. Delaware River Zones 3, 4, and 5 .....	These classifications are each assigned the criteria in: i. Column C1—none. ii. Column C2—none. iii. Column D2—none.

(iii) The human health criteria shall be applied at the State-proposed 10<sup>-6</sup> risk level for EPA rated Class A, B<sub>1</sub>, and B<sub>2</sub> carcinogens; EPA rated Class C carcinogens shall be applied at 10<sup>-5</sup> risk level. To determine appropriate

value for carcinogens, see footnote c. in the matrix in paragraph (b)(1) of this section.

(4) *Puerto Rico, EPA Region 2.* (i) All waters assigned to the following use classifications in the Puerto Rico

§ 131.36

40 CFR Ch. I (7-1-03 Edition)

Water Quality Standards (promulgated by Resolution Number R-83-5-2) are subject to the criteria in paragraph (d)(4)(ii) of this section, without exception.

Article 2.2.2—Class SB  
 Article 2.2.3—Class SC  
 Article 2.2.4—Class SD

(ii) The following criteria from the matrix in paragraph (b)(1) of this section apply to the use classifications identified in paragraph (d)(4)(i) of this section:

Use classification	Applicable criteria
Class SD	This Classification is assigned criteria in: Column B1—all, except: 10, 102, 105, 107, 108, 111, 112, 113, 115, 117, and 126. Column B2—all, except: 105, 107, 108, 112, 113, 115, and 117. Column D1—all, except: 6, 14, 105, 112, 113, and 115. Column D2—all, except: 14, 105, 112, 113, and 115.
Class SB, Class SC	These Classifications are assigned criteria in:

Use classification	Applicable criteria
1. Class C .....	This classification is assigned the additional criteria in: Column B2; #10, 118, 126.

Use classification	Applicable criteria
	Column C1—all, except: 4, 5b, 7, 8, 10, 11, 13, 102, 105, 107, 108, 111, 112, 113, 115, 117, and 126. Column C2—all, except: 4, 5b, 10, 13, 108, 112, 113, 115, and 117. Column D2—all, except: 14, 105, 112, 113, and 115.

(iii) The human health criteria shall be applied at the State-proposed  $10^{-5}$  risk level. To determine appropriate value for carcinogens, see footnote c, in the criteria matrix in paragraph (b)(1) of this section.

(5) *District of Columbia, EPA Region 3.*

(i) All waters assigned to the following use classifications in chapter 11 Title 21 DCMR, Water Quality Standards of the District of Columbia are subject to the criteria in paragraph (d)(5)(ii) of this section, without exception:

1101.2 Class C waters

(ii) The following criteria from the matrix in paragraph (b)(1) of this section apply to the use classification identified in paragraph (d)(5)(i) of this section:

(iii) The human health criteria shall be applied at the State-adopted  $10^{-6}$  risk level.

(6) *Florida, EPA Region 4.*

(i) All waters assigned to the following use classifications in Chapter 17-301 of the Florida Administrative Code (i.e., identified in Section 17-302.600) are subject to the criteria in paragraph (d)(6)(ii) of this section, without exception:

Class I  
 Class II  
 Class III

(ii) The following criteria from the matrix paragraph (b)(1) of this section apply to the use classifications identified in paragraph (d)(6)(i) of this section:

Use classification	Applicable criteria
Class I	This classification is assigned the criteria in: Column D1—#16
Class II Class III (marine)	This classification is assigned the criteria in: Column D2—#16
Class III (freshwater)	This classification is assigned the criteria in: Column D2—#16

(iii) The human health criteria shall be applied at the State-adopted  $10^{-6}$  risk level.

(7) [Reserved]

**Environmental Protection Agency**

**§ 131.36**

**(8) Arkansas, EPA Region 6.**

(i) All waters assigned to the following use classification in section 4C (Waterbody uses) identified in Arkansas Department of Pollution Control and Ecology's Regulation No. 2 as amended and entitled, "Regulation Establishing Water Quality Standards for Surface Waters of the State of Arkansas" are subject to the criteria in paragraph (d)(8)(ii) of this section, without exception:

Extraordinary Resource Waters  
Ecologically Sensitive Waterbody  
Natural and Scenic Waterways  
Fisheries:

- (1) Trout
- (2) Lakes and Reservoirs
- (3) Streams
  - (a) Ozark Highlands Ecoregion
  - (b) Boston Mountains Ecoregion
  - (c) Arkansas River Valley Ecoregion
  - (d) Ouachita Mountains Ecoregion
  - (e) Typical Gulf Coastal Ecoregion
  - (f) Spring Water-influenced Gulf Coastal Ecoregion
  - (g) Least-altered Delta Ecoregion
  - (h) Channel-altered Delta Ecoregion

Domestic Water Supply

(ii) The following criteria from the matrix in paragraph (b)(1) of this section apply to the use classification identified in paragraph (d)(8)(i) of this section:

Use classification	Applicable criteria
Extraordinary Resource Waters Ecologically Sensitive Waterbody Natural and Scenic Waterways Fisheries:	
(1) Trout	
(2) Lakes and Reservoirs	
(3) Streams	

Use classification      Applicable criteria

- (a) Ozark Highlands Ecoregion
- (b) Boston Mountains Ecoregion
- (c) Arkansas River Valley Ecoregion
- (d) Ouachita Mountains Ecoregion
- (e) Typical Gulf Coastal Ecoregion
- (f) Spring Water-influenced Gulf Coastal Ecoregion
- (g) Least-altered Delta Ecoregion
- (h) Channel-altered Delta Ecoregion

These uses are each assigned the criteria in—  
Column B1—#4, 5a, 5b, 6, 7, 8, 9, 10, 11, 13, 14  
Column B2—#4, 5a, 5b, 6, 7, 8, 9, 10, 13, 14

**(9) Kansas, EPA Region 7.**

(i) All waters assigned to the following use classification in the Kansas Department of Health and Environment regulations, K.A.R. 28-16-28b through K.A.R. 28-16-28f, are subject to the criteria in paragraph (d)(9)(ii) of this section, without exception.

- Section (2)(A)—Special Aquatic Life Use Waters
- Section (2)(B)—Expected Aquatic Life Use Waters
- Section (2)(C)—Restricted Aquatic Life Use Waters
- Section (3)—Domestic Water Supply.
- Section (4)—Food Procurement Use.

(ii) The following criteria from the matrix in paragraph (b)(1) of this section apply to the use classifications identified in paragraph (d)(9)(i) of this section:

Use classification	Applicable criteria
1. Sections (2)(A), (2)(B), (2)(C), (4) .....	These classifications are each assigned criteria as follows: i. Column B1, #2. ii. Column D2, #12, 21, 29, 39, 46, 68, 79, 81, 86, 93, 104, 114, 118.
2. Section (3) .....	This classification is assigned all criteria in: Column D1, all except #1, 9, 12, 14, 15, 17, 22, 33, 36, 39, 44, 75, 77, 79, 90, 112, 113, and 115.

§ 131.36

40 CFR Ch. I (7-1-03 Edition)

(iii) The human health criteria shall be applied at the State-adopted  $10^{-6}$  risk level.

(10) *California, EPA Region 9.*

(i) 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"), as amended, 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)(10)(ii) of this section, without exception. These criteria amend the portions of the existing State standards contained in the Basin Plans. More particularly these criteria amend water quality criteria

contained in the Basin Plan Chapters specifying water quality objectives (the State equivalent of federal water quality criteria) for the toxic pollutants identified in paragraph (d)(10)(ii) of this section. 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)(10)(ii) 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.)

(ii) The following criteria from the matrix in paragraph (b)(1) of this section apply to the water and use classifications defined in paragraph (d)(10)(i) of this section and identified below:

Water and use classification	Applicable criteria
Waters of the State defined as bays or estuaries except the Sacramento-San Joaquin Delta and San Francisco Bay	These waters are assigned the criteria in: Column B1—pollutants 5a and 14 Column B2—pollutants 5a and 14 Column C1—pollutant 14 Column C2—pollutant 14 Column D2—pollutants 1, 12, 17, 18, 21, 22, 29, 30, 32, 33, 37, 38, 42-44, 46, 48, 49, 54, 59, 66, 67, 68, 78-82, 85, 89, 90, 91, 93, 95, 96, 98
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	These waters are assigned the criteria in: Column B1—pollutants 5a and 14 Column B2—pollutants 5a and 14 Column D1—pollutants 1, 12, 15, 17, 18, 21, 22, 29, 30, 32, 33, 37, 38, 42-48, 49, 59, 66, 67, 68, 78-82, 85, 89, 90, 91, 93, 95, 96, 98
Waters of the State defined as inland without an MUN use designation	These waters are assigned the criteria in: Column B1—pollutants 5a and 14 Column B2—pollutants 5a and 14 Column D2—pollutants 1, 12, 17, 18, 21, 22, 29, 30, 32, 33, 37, 38, 42-44, 46, 48, 49, 54, 59, 66, 67, 68, 78-82, 85, 89, 90, 91, 93, 95, 96, 98

**Environmental Protection Agency****§ 131.36**

Water and use classification	Applicable criteria
Waters of the San Joaquin River from the mouth of the Merced River to Vernalis	In addition to the criteria assigned to these waters elsewhere in this rule, these waters are assigned the criteria in: Column B2—pollutant 10
Waters of Salt Slough, Mud Slough (north) and the San Joaquin River, Sack Dam to the mouth of the Merced River	In addition to the criteria assigned to these waters elsewhere in this rule, these waters are assigned the criteria in: Column B1—pollutant 10 Column B2—pollutant 10
Waters of San Francisco Bay upstream to and including Suisun Bay and the Sacramento-San Joaquin Delta	These waters are assigned the criteria in: Column B1—pollutants 5a, 10* and 14 Column B2—pollutants 5a, 10* and 14 Column C1—pollutant 14 Column C2—pollutant 14 Column D2—pollutants 1, 12, 17, 18, 21, 22, 29, 30, 32, 33, 37, 38, 42-44, 46, 48, 49, 54, 59, 66, 67, 68, 78-82, 85, 89, 90, 91, 93, 95, 96, 98
All inland waters of the United States or enclosed bays and estuaries that are waters of the United States that include an MUN use designation and that the State has either excluded or partially excluded from coverage under its Water Quality Control Plan for Inland Surface Waters of California, Tables 1 and 2, or its Water Quality Control Plan for Enclosed Bays and Estuaries of California, Tables 1 and 2, or has deferred applicability of those tables. (Category (a), (b), and (c) waters described on page 6 of Water Quality Control Plan for Inland Surface Waters of California or page 6 of its Water Quality Control Plan for Enclosed Bays and Estuaries of California.)	These waters are assigned the criteria for pollutants for which the State does not apply Table 1 or 2 standards. These criteria are: Column B1—all pollutants Column B2—all pollutants Column D1—all pollutants except #2
All inland waters of the United States that do not include an MUN use designation and that the State has either excluded or partially excluded from coverage under its Water Quality Control Plan for Inland Surface Waters of California, Tables 1 and 2, or has deferred applicability of these tables. (Category (a), (b), and (c) waters described on page 6 of Water Quality Control Plan for Inland Surface Waters of California.)	These waters are assigned the criteria for pollutants for which the State does not apply Table 1 or 2 standards. These criteria are: Column B1—all pollutants Column B2—all pollutants Column D2—all pollutants except #2
All enclosed bays and estuaries that are waters of the United States that do not include an MUN designation and that the State has either excluded or partially excluded from coverage under its Water Quality Control Plan for Inland Surface Waters of California, Tables 1 and 2, or its Water Quality Control Plan for Enclosed Bays and Estuaries of California, Tables 1 and 2, or has deferred applicability of those tables. (Category (a), (b), and (c) waters described on page 6 of Water Quality Control Plan for Inland Surface Waters of California or page 6 of its Water Quality Control Plan for Enclosed Bays and Estuaries of California.)	These waters are assigned the criteria for pollutants for which the State does not apply Table 1 or 2 standards. These criteria are: Column B1—all pollutants Column B2—all pollutants Column C1—all pollutants Column C2—all pollutants Column D2—all pollutants except #2

\*The fresh water selenium criteria are included for the San Francisco Bay estuary because high levels of bioaccumulation of selenium in the estuary indicate that the salt water criteria are underprotective for San Francisco Bay.

§ 131.36

40 CFR Ch. I (7-1-03 Edition)

(iii) The human health criteria shall be applied at the State-adopted  $10^{-6}$  risk level.

(11) *Nevada, EPA Region 9.* (i) All waters assigned the use classifications in Chapter 445 of the Nevada Administrative Code (NAC), Nevada Water Pollution Control Regulations, which are referred to in paragraph (d)(11)(ii) of this section, are subject to the criteria in paragraph (d)(11)(ii) of this section, without exception. These criteria amend the existing State standards

contained in the Nevada Water Pollution Control Regulations. More particularly, these criteria amend or supplement the table of numeric standards in NAC 445.1339 for the toxic pollutants identified in paragraph (d)(11)(ii) of this section.

(ii) The following criteria from matrix in paragraph (b)(1) of this section apply to the waters defined in paragraph (d)(11)(i) of this section and identified below:

Water and use classification
Waters that the State has included in NAC 445.1339 where Municipal or domestic supply is a designated use
Waters that the State has included in NAC 445.1339 where Municipal or domestic supply is not a designated use

Applicable criteria
These waters are assigned the criteria in: Column B1—pollutant #118 Column B2—pollutant #118 Column D1—pollutants #15, 16, 18, 19, 20, 21, 23, 26, 27, 29, 30, 34, 37, 38, 42, 43, 55, 58-62, 64, 66, 73, 74, 78, 82, 85, 87-89, 91, 92, 96, 98, 100, 103, 104, 105, 114, 116, 117, 118
These waters are assigned the criteria in: Column B1—pollutant #118 Column B2—pollutant #118 Column D2—all pollutants except #2.

(iii) The human health criteria shall be applied at the  $10^{-5}$  risk level, consistent with State policy. To determine appropriate value for carcinogens, see footnote c in the criteria matrix in paragraph (b)(1) of this section.

(12) *Alaska, EPA Region 10.*

(i) All waters assigned to the following use classifications in the Alaska Administrative Code (AAC), Chapter 18 (i.e., identified in 18 AAC 70.020) are subject to the criteria in paragraph (d)(12)(ii) of this section, without exception:

- 70.020.(1) (A) Fresh Water
- 70.020.(1) (A) Water Supply
  - (i) Drinking, culinary, and food processing,
  - (iii) Aquaculture;
- 70.020.(1) (B) Water Recreation
  - (i) Contact recreation,
  - (ii) Secondary recreation;
- 70.020.(1) (C) Growth and propagation of fish, shellfish, other aquatic life, and wildlife
- 70.020.(2) (A) Marine Water
- 70.020.(2) (A) Water Supply
  - (i) Aquaculture,
- 70.020.(2) (B) Water Recreation
  - (i) contact recreation,
  - (ii) secondary recreation;
- 70.020.(2) (C) Growth and propagation of fish, shellfish, other aquatic life, and wildlife;
- 70.020.(2) (D) Harvesting for consumption of raw mollusks or other raw aquatic life.

(ii) The following criteria from the matrix in paragraph (b)(1) of this section apply to the use classifications identified in paragraph (d)(12)(i) of this section:

Use classification	Applicable criteria
(1)(A) i	Column B1—#9, 10, 13, 53, and 126 Column B2—#10 Column D1 #’s 16, 18-21, 23, 26, 27, 29, 30, 32, 37, 38, 42-44, 53, 55, 59-62, 64, 66, 68, 73, 74, 78, 82, 85, 88, 89, 91-93, 96, 98, 102-105, 107-111, 117-126
(1)(A) iii	Column B1—#9, 10, 13, 53, and 126 Column B2—#10 Column D2 #’s 14, 16, 18-21, 22, 23, 26, 27, 29, 30, 32, 37, 38, 42-44, 46, 53, 54, 55, 59-62, 64, 66, 68, 73, 74, 78, 82, 85, 88-93, 95, 96, 98, 102-105, 107-111, 115-126
(1)(B)i, (1)(B) ii, (1)(C)	Column B1—#9, 10, 13, 53, and 126 Column B2—#10 Column D2

**Environmental Protection Agency**

**§ 131.37**

Use classification	Applicable criteria
	#'s 14, 16, 18-21, 22, 23, 26, 27, 29, 30, 32, 37, 38, 42-44, 46, 53, 54, 55, 59-62, 64, 66, 68, 73, 74, 78, 82, 85, 88-93, 95, 96, 98, 102-105, 107-111, 115-126
(2)(A) i, (2)(B)i, and (2)(B)ii, (2)(C), (2)(D)	Column C1—#9, 10, 13, and 53 Column C2—#10 Column D2 #'s 14, 16, 18-21, 22, 23, 26, 27, 29, 30, 32, 37, 38, 42-44, 46, 53, 54, 55, 59-62, 64, 66, 68, 73, 74, 78, 82, 85, 88-93, 95, 96, 98, 102-105, 107-111, 115-126

Use classification	Applicable criteria
	Column D2—Marine waters and freshwaters not protected for domestic water supply

(iii) The human health criteria shall be applied at the State proposed risk level of 10<sup>-6</sup>.

[57 FR 60910, Dec. 22, 1992; 58 FR 31177, June 1, 1993, as amended at 58 FR 34499, June 25, 1993; 58 FR 36142, July 6, 1993; 60 FR 22229, 22235, May 4, 1995; 60 FR 44120, Aug. 24, 1995; 61 FR 60617, Nov. 29, 1996; 62 FR 52927, Oct. 9, 1997; 62 FR 53214, Oct. 10, 1997; 63 FR 10144, Mar. 2, 1998; 64 FR 61193, Nov. 9, 1999; 65 FR 19661, Apr. 12, 2000; 67 FR 68041, Nov. 8, 2002; 67 FR 71846, Dec. 3, 2002]

(iii) The human health criteria shall be applied at the State-proposed risk level of 10<sup>-5</sup>. To determine appropriate value for carcinogens, see footnote c in the criteria matrix in paragraph (b)(1) of this section.

(13) [Reserved]

(14) *Washington, EPA Region 10.*

(i) All waters assigned to the following use classifications in the Washington Administrative Code (WAC), Chapter 173-201 (i.e., identified in WAC 173-201-045) are subject to the criteria in paragraph (d)(14)(ii) of this section, without exception:

- 173-201-045
- Fish and Shellfish
- Fish
- Water Supply (domestic)
- Recreation

(ii) The following criteria from the matrix in paragraph (b)(1) of this section apply to the use classifications identified in paragraph (d)(14)(i) of this section:

Use classification	Applicable criteria
Fish and Shellfish; Fish	These classifications are assigned the criteria in: Column C2—6, 14 Column D2—all
Water Supply (domestic)	These classifications are assigned the criteria in: Column D1—all
Recreation	This classification is assigned the criteria in:

**§ 131.37 California.**

(a) *Additional criteria.* The following criteria are applicable to waters specified in the Water Quality Control Plan for Salinity for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary, adopted by the California State Water Resources Control Board in State Board Resolution No. 91-34 on May 1, 1991:

(1) *Estuarine habitat criteria.* (i) *General rule.* (A) Salinity (measured at the surface) shall not exceed 2640 micromhos/centimeter specific conductance at 25 °C (measured as a 14-day moving average) at the Confluence of the Sacramento and San Joaquin Rivers throughout the period each year from February 1 through June 30, and shall not exceed 2640 micromhos/centimeter specific conductance at 25 °C (measured as a 14-day moving average) at the specific locations noted in Table 1 near Roe Island and Chipps Island for the number of days each month in the February 1 to June 30 period computed by reference to the following formula:

$$\text{Number of days required in Month X} = \frac{\text{Total number of days in Month X}^*}{1 - 1/(1+e^K)}$$

where

K = A + (B\*natural logarithm of the previous month's 8-River Index);  
A and B are determined by reference to Table 1 for the Roe Island and Chipps Island locations;  
x is the calendar month in the February 1 to June 30 period;