conversion factors presented in today's rule reflect the best science available to EPA at the time of promulgation and contain minor modifications from those in the attachment to the February 15 partial settlement agreement. For each metal specific conversion factor, the changes between the draft guidance and today's rule are less than 10%. EPA has determined these changes to be minor.

1. Freshwater Criteria Conversion Factors

The final freshwater conversion factors used in today's rule are contained in: "Derivation of Conversion Factors for the Calculation of Dissolved Freshwater Aquatic Life Criteria for Metals" (U.S. EPA, 1995), available from the Water Docket and are presented in Table 2 below. This study did not include laboratory simulation tests for mercury or silver, therefore, the freshwater conversion factors for mercury and silver used today are from the Metals Policy.

The conversion factors for most freshwater metals were established as constant values. For cadmium and lead however, EPA found that water hardness mediated the conversion factor and should be taken into account when converting total recoverable cadmium and lead criteria to dissolved. Table 2 presents the hardness-dependent conversion factors for cadmium and lead. The hardness-dependent conversion factor for lead was included in the August 30, 1994 Notice of Availability (59 FR 44678). In today's action, EPA is specifically requesting comment on the use of hardnessdependent conversion factor for cadmium.

TABLE 2.—FRESHWATER CRITERIA CONVERSION FACTORS FOR DIS-SOLVED METALS

Metal	Conversion factors ^a	
	Acute	Chronic
Arsenic	1.000	1.000
Cadmium ^b	0.944	0.909
Chromium (III)	0.316	0.860
Chromium(VI)	0.982	0.962
Copper	0.960	0.960
Lead ^b	0.791	0.791
Mercury	° 0.85	₫ N/A
Nickel	0.998	0.997
Silver	° 0.85	° N/A
Zinc	0.978	0.986

^a The conversion factors are given to three decimal places because they are intermediate values in the calculation of dissolved criteria.

^bConversion factors are hardness-dependent. The values shown are with a hardness of 100 mg/L as calcium carbonate (CaCO₃). Conversion factors (CF) for any hardness can be calculated using the following equations:

Cadmium Acute:	CF=1.136672-[(In	hardness)
(0.041838)] Chronic:	CF=1.101672-[(In	hardness)

(0.041838)] Lead (Acute and Chronic): CF=1.46203-[(In hardness)(0.145712)]

^c Conversion factor from: Office of Water Policy and Technical Guidance on Interpretation and Implementation of Aquatic Life Metals Criteria, October 1, 1993. Factors were expressed to two decimal places.

^dCCC for mercury cannot be converted to dissolved, because it is based on mercury residues in aquatic organisms rather than toxicity. ^eNot applicable, EPA has not published final chronic criteria values for silver.

2. Saltwater Criteria Conversion Factors

Acute saltwater conversion factors are being made available through today's rule. The data and the acute criteria conversion factors for saltwater are contained in: "Derivation of Conversion Factors for the Calculation of Dissolved Saltwater Aquatic Life Criteria for Metals" (U.S. EPA 1995). This summary report and its supporting data are available from the Water Docket. Saltwater chronic conversion factors have not been developed separately and therefore are not available for today's rule. Based on close similarities between the freshwater acute and chronic conversion factors, EPA believes that, if calculated, the chronic saltwater conversion factors would be nearly the same as the acute saltwater factors. In the absence of these chronic conversion factors, the saltwater acute conversion factors will apply. The saltwater conversion factors are presented in Table 3 below. Saltwater simulation tests were not completed for mercury or silver, therefore the conversion factors from the Metals Policy will continue to apply.

TABLE 3.—SALTWATER CRITERIA CON-VERSION FACTORS FOR DISSOLVED METALS

Metal	sion fac- tors a
Arsenic	1.000
Cadmium	0.994
Chromium (III)	(d)
Chromium (VI)	0.993
Copper	0.83
Lead	0.951
Mercury	^{b c} 0.85
Nickel	0.990
Selenium	0.998
Silver	^b 0.85
Zinc	0.946
	1

^a Conversion factors on this table were calculated for acute criteria only. Conversion factors for chronic criteria are not currently available. In the absence of chronic conversion factors saltwater acute conversion factors are used. ^bConversion factor from: Office of Water Policy and Technical Guidance on Interpretation and Implementation of Aquatic Life Metals Criteria, October 1, 1993. Factors were expressed to two decimal places.

^c CCC for mercury cannot be converted to dissolved, because it is based on mercury residues in aquatic organisms rather than toxicity. ^d No saltwater criteria.

D. Applicability Requirements for Metals Criteria

Through today's action, EPA is also requesting comments on the applicability requirements in 40 CFR 131.36(c) as they apply to the metals criteria. In particular, EPA is requesting comments on §131.36(c)(4)(i) regarding the calculation of hardness-dependent freshwater metals criteria. Section 131.36(c)(4)(i) describes the minimum and maximum hardness values (25 mg/ L and 400 mg/L as CaCO₃, respectively) to be used when calculating hardnessdependent freshwater metals criteria. This requirement is not changed by today's interim final rule, however EPA is requesting comment on an alternative approach. Most of the data used to develop these hardness formulas were in the hardness range of 25 mg/L to 400 mg/L as CaCO₃. The formulas are therefore most accurate in this range. Using a hardness of 25 mg/L for calculating criteria, when the actual ambient hardness is less than 25 mg/L, could result in criteria that are underprotective of aquatic life. EPA is therefore requesting comments on the use of the actual ambient hardness for calculating criteria when the hardness is below 25 mg/L as CaCO₃.

Most freshwaters of the U.S. have an ambient hardness of less than 400 mg/ L as CaCO₃. Using 400 mg/L to calculate criteria, for waters with an ambient hardness of greater than 400 mg/L, may result in over-protective criteria because at a hardness above 400 mg/L, other confounding factors, which may cause this hardness, can also affect the toxicity. EPA is requesting comment on an approach that would make two options available for calculating metals criteria for waters with a hardness of greater than 400 mg/L as CaCO₃: Option 1—use 400 mg/L as CaCO₃ for the criteria calculation or, Option 2-use the actual hardness and require the use of the water-effect ratio to modify the final criteria value to more accurately reflect ambient conditions. (EPA notes that in the NTR States, the use of the water-effect ratio is assigned a value of 1.0, unless otherwise specified by the permitting authority. See 40 CFR 131.36(c)(4)(iii).)