Because the NTR was to cover a substantial number of water bodies of varying water quality, EPA selected what it considered the simplest, more conservative approach and the approach reflected in its criteria documents, to implement the metals criteria, namely the total recoverable method. Accordingly, the metals criteria promulgated in the NTR were expressed as total recoverable metals, although EPA also provided for site-specific criteria development.³

Thereafter, EPA continued to work with States and other interested parties on the issue of metals bioavailability and toxicity. EPA held a workshop of invited experts on this issue; the results of the consultations were published at 58 FR 32131, June 8, 1993. As a result of these consultations, the Agency issued a policy memorandum on October 1, 1993, entitled: Office of Water Policy and Technical Guidance on Interpretation and Implementation of Aquatic Life Metals Criteria ("Metals Policy"). (The complete October 1, 1993) memorandum can be obtained from EPA's Office of Water Resource Center (202) 260-7786 or the Office of Water Docket.) The Metals Policy states:

It is now the policy of the Office of Water that the use of dissolved metal to set and measure compliance with water quality standards is the recommended approach, because dissolved metal more closely approximates the bioavailable fraction of metal in the water column than does total recoverable metal.

It further states:

Until the scientific uncertainties are better resolved, a range of different risk management decisions can be justified. EPA recommends that State water quality standards be based on dissolved metal. EPA will also approve a State risk management decision to adopt standards based on total recoverable metal, if those standards are otherwise approvable as a matter of law. (See Section 510, Federal Water Pollution Control Act, Public Law 100–4, 33 U.S.C. 466 et seq.)

The adoption of the Metals Policy did not change the Agency's position that the existing total recoverable criteria published under Section 304(a) of the Clean Water Act continue to be scientifically defensible. EPA developed the total recoverable criteria using high-quality analytical data and are still scientifically defensible criteria. When developing and adopting its own standards, a State, in making its risk management decision, may wish to consider sediment, food chain effects

and other fate-related issues and decide to adopt total recoverable or dissolved metals criteria.

In general, EPA continues to conduct research on metals toxicity to further refine the criteria and their implementation. However, the aim of both the Clean Water Act and EPA policy is that a more effective way of incorporating new science into the water quality program is for the States to promulgate their own standards and implementation policies. The States can then make appropriate updates, rather than relying on Federal promulgations such as today's rule.

3. Litigation and Settlement of NTR Metals Issues

A number of parties brought lawsuits challenging the NTR metals criteria. See American Forest and Paper Ass'n, Inc. et al. v. EPA, Consolidated case No. 93-0694 RMU (D.D.C.) The Plaintiffs in those lawsuits wanted the permitting authorities in the NTR States to use criteria based on dissolved metal rather than total recoverable. After careful consideration of the issue, EPA concluded that it was in the public interest to revise the metals criteria promulgated in the NTR to reflect the Office of Water's new metals policy. On February 15, 1995, EPA and the Plaintiffs filed a partial settlement agreement with the court. Pursuant to the terms of the partial settlement agreement, EPA agreed to issue an administrative stay of the numeric aquatic life water quality criteria (expressed as total recoverable metal) for: arsenic, cadmium, chromium (III), chromium (VI), copper, lead, mercury (acute only), nickel, selenium (saltwater only), silver, and zinc. That stay is published in a separate notice in today's **Federal Register**. The stay is intended to be in effect only until EPA takes action to amend the NTR by promulgating new metals criteria based on dissolved metal. With today's interim final rule, EPA is promulgating new metals criteria for those metals listed in the stay based on dissolved metal and therefore this action will supersede the administrative stay.

B. Today's Interim Final Rule

EPA's action today revises the NTR that established numeric aquatic life metals criteria for 9 States, Puerto Rico and the District of Columbia (Table 1). (Of the 12 NTR States, aquatic life metals criteria were only promulgated for nine.) The numeric criteria in today's rule reflect the Office of Water's current policy with respect to metals. This action promulgates dissolved metals criteria for those total

recoverable metals criteria subject to the Agency's administrative stay.

TABLE 1.—STATES SUBJECT TO THE REVISED METALS CRITERIA 1

Alaska
Arkansas
California
Idaho
Kansas
Michigan
New Jersey
Vermont
Washington
District of Columbia
Puerto Rico

C. Conversion Factors: Total Recoverable to Dissolved Metal

Because EPA's Section 304(a) criteria are expressed as total recoverable metal, to express the criteria as dissolved, application of a conversion factor is necessary to account for the particulate metal present in the laboratory toxicity tests used to develop the total recoverable criteria. Initially, EPA included a set of recommended freshwater conversion factors with the Metals Policy. Based on additional laboratory evaluations that simulated the original toxicity tests, EPA has refined the procedures used to develop freshwater conversion factors for aquatic life criteria. EPA made new conversion factors available for public comment in the context of EPA's Proposed Guidance for the Great Lakes System on August 30, 1994, at 59 FR 44678.

EPA has also conducted saltwater laboratory simulation tests for the development of conversion factors for saltwater metals criteria. The saltwater simulation tests were conducted using the same methodology as the freshwater tests with minor modifications, necessary to account for saltwater. The saltwater test results are being made available with today's rule. The conversion factors in this rule and other technical reports referenced herein, supersede the conversion factors presented in Attachment #2 of the Metals Policy.

Total recoverable to dissolved metal conversion factors were attached to the partial settlement agreement in the form of a draft guidance entitled, Guidance to States Subject to the National Toxics Rule For Setting NPDES Limits During the Stay of the Metals Criteria. (The partial settlement agreement is available from the Water Docket.) The draft guidance used data that were available through December 21, 1994. The

U.S. EPA, May 1992. (Notice of availability published at 57 FR 24041, June 5, 1992.)

³See Interim Guidance on the Determination and Use of Water-Effect Ratios for Metals, February 1994, EPA 823–B–94–001.

¹Today's interim final rule may have differing applicability for each of the States in this table depending on the State's individual compliance with Section 303(c)(2)(B) of the Clean Water Act. See 40 CFR 131.36(d) for State applicability.