

**ENVIRONMENTAL PROTECTION AGENCY**

**40 CFR Part 131**  
[FRL-5467-9]

**Water Quality Standards for Surface Waters in Arizona**

**AGENCY:** Environmental Protection Agency (EPA).  
**ACTION:** Final rule.

**SUMMARY:** This rule establishes water quality standards applicable to waters of the United States in the State of Arizona. EPA is promulgating this rule pursuant to a court order in *Defenders of Wildlife v. Browner* (Docket No. Civ. 93-234 TUC ACM). The rule designates

fish consumption as a use for certain waters, and requires implementation of a monitoring program regarding mercury's effects on wildlife. On January 29, 1996, EPA published a proposed rule that included other provisions which are not being promulgated as part of today's rule because, after EPA's proposal, the Arizona Department of Environmental Quality adopted revised regulations and policies in those areas which EPA Region 9 has determined are in accordance with the Clean Water Act.

**EFFECTIVE DATE:** June 6, 1996.

**ADDRESSES:** This action's administrative record is available for review and copying at the Water Management Division, EPA, Region 9, 75 Hawthorne

St., San Francisco, CA 94105. For access to the docket materials, call (415) 744-1978 for an appointment. A reasonable fee will be charged for copies.

**FOR FURTHER INFORMATION CONTACT:** Gary Wolinsky, Permits and Compliance Branch, W-5, Water Management Division, EPA, Region 9, 75 Hawthorne St., San Francisco, CA 94105, telephone: 415 744-1978.

**SUPPLEMENTARY INFORMATION:**

A. Regulated Entities

Entities potentially regulated by this action are those discharging pollutants to waters of the United States in Arizona. Regulated categories and entities include:

Category	Examples of regulated entities
Industry .....	Industries discharging mercury to surface waters in Arizona, or discharging pollutants to particular surface waters in Arizona listed in sec. 131.31(b) of the rule.
Municipalities .....	Publicly-owned treatment works discharging mercury to surface waters in Arizona, or discharging pollutants to particular surface waters listed in sec. 131.31(b) of the rule.

This table is not intended to be exhaustive, but rather provides a guide for readers regarding entities likely to be regulated by this action. This table lists the types of entities that EPA is now aware could potentially be regulated by this action. Other types of entities not listed in the table could also be regulated. To determine whether your facility is regulated by this action, you should examine the list of waterbodies in section 131.31(b) of this rule, and examine 40 CFR 131.2 which describes the purpose of water quality standards such as those established in this rule. If you have questions regarding the applicability of this action to a particular entity, consult the person listed in the preceding **FOR FURTHER INFORMATION CONTACT** section.

B. Background

Under section 303 (33 U.S.C. 1313) of the Clean Water Act (CWA), states are required to develop water quality standards for waters of the United States within the state. Section 303(c) provides that a water quality standard shall include a designated use or uses to be made of the water and criteria necessary to protect those uses. States are required to review their water quality standards at least once every three years and, if appropriate, revise or adopt new standards. 33 U.S.C. 1313(c). States are required to submit the results of their triennial review of their water quality standards to EPA. EPA is to approve or disapprove any new or revised standards. Id.

States may include in their standards policies generally affecting the standards' application and implementation. See 40 CFR 131.13. These policies are subject to EPA review and approval. 40 CFR 131.6(f), 40 CFR 131.13.

Section 303(c)(4) of the CWA authorizes EPA to promulgate water quality standards that supersede disapproved State water quality standards, or in any case where the Administrator determines that a new or revised water quality standard is needed to meet the CWA's requirements.

In September 1993, EPA, Region 9, disapproved portions of Arizona's standards pursuant to section 303(c) of the CWA and 40 CFR 131.21. The portions of Arizona's standards disapproved in September 1993 relate to: the exclusion of mining-related impoundments from water quality standards; the absence of "fish consumption" as a designated use for certain water bodies; the absence of implementation procedures for the State's narrative nutrient standard; the absence of biomonitoring implementation procedures for the State's narrative toxicity criterion; and the inclusion of practical quantitation limits (PQLs) in Arizona's standards. In April 1994, EPA, Region 9, also disapproved Arizona's lack of water quality criteria protective of wildlife for mercury.

On November 1, 1995, the United States District Court for the District of Arizona ordered EPA to prepare and

publish proposed regulations setting forth revised or new water quality standards for those standards disapproved in September 1993 and April 1994 within 90 days. *Defenders of Wildlife v. Browner*, Docket No. Civ 93-234 TUC ACM.

On December 29, 1995, the Arizona Department of Environmental Quality (ADEQ) published proposed revisions to its standards. 1 Ariz. Admin. Reg. 2811.

Consistent with the Court's order, on January 29, 1996, EPA published a Federal Register notice proposing standards related to the mining exclusion, fish consumption designated use, PQLs, and implementation policies and procedures. 61 FR 2766. The notice also identified, and sought comment on, policies that EPA, Region 9, intended to use to implement State narrative criteria as they relate to toxicity, nutrients, and mercury.

The Court order in *Defenders of Wildlife* directs EPA to promulgate final water quality standards 90 days after EPA proposes such standards unless Arizona has adopted revised or new water quality standards which EPA determines are in accordance with the CWA. In January 1996, ADEQ adopted implementation procedures for the State's narrative nutrient criteria. In April 1996, ADEQ adopted implementation procedures for the State's narrative toxic criteria. On April 26, 1996, EPA, Region 9, approved Arizona's implementation procedures for the State's narrative nutrient and toxic criteria. Because EPA has

determined that Arizona has addressed EPA's 1993 disapproval action regarding the absence of appropriate implementation procedures for toxicity and nutrients through the adoption of procedures that are in accordance with the Act, EPA is not promulgating provisions in the final rule related to these implementation procedures.

ADEQ adopted revisions to its standards on March 22, 1996, and, after obtaining the approval of the State's Regulatory Review Council, filed revisions to its standards with Arizona's Secretary of State on April 24, 1996. ADEQ's rulemaking repealed the mining related provision (R18-11-103.2) disapproved by EPA, Region 9, in September 1993, and established a revised exemption related to mining impoundments at R18-11-102. In addition, ADEQ's rulemaking added the fish consumption use to most of the waters which would have been designated with the fish consumption use under EPA's proposal. The State's rulemaking also deleted the appendix which prescribed PQLs from the State's water quality standards regulations. On April 26, 1996, EPA, Region 9 approved these revised regulations thereby removing the need to promulgate a Federal regulation addressing these issues.

ADEQ has also participated, with EPA, Region 9, and the U.S. Fish and Wildlife Service, in the development of an interim approach to protect predatory wildlife from mercury until appropriate numeric criteria can be developed. In conjunction with Arizona's priority pollutant program, ADEQ, in cooperation with the Arizona Game and Fish Department, the U.S. Fish and Wildlife Service, and EPA will conduct a tissue monitoring program to assess the magnitude and extent of mercury bioaccumulation in the prey base of the bald eagle and other fish-eating birds in Arizona. The monitoring program identifies further actions related to sampling, source identification and remedy selection which the agencies will undertake if mercury levels in fish are found above a specified action level. Because pursuit of this monitoring program is an important component in addressing the problem of mercury contamination in Arizona waters, EPA has included the proposed regulatory provision related to mercury in the final rule. In addition, EPA is promulgating the fish consumption use designation for waterbodies identified in EPA's proposal for which the State did not adopt the fish consumption use designation. As explained more fully below, should EPA decide to approve

"use attainability analyses" recently submitted by Arizona, EPA will proceed expeditiously to withdraw the revised use designations contained in today's rule.

### C. Summary of Final Rule and Response to Major Comments

A description of EPA's final action, and a summary of major comments regarding the proposal and EPA's response, are set forth below. Additional comments and responses to comments are in the administrative record.

#### 1. "Fish Consumption" Use

Arizona has designated several uses for its waters, including uses defined as "fish consumption", "aquatic and wildlife (cold water fishery)", "aquatic and wildlife (effluent dominated water)", "aquatic and wildlife (ephemeral)", and "aquatic and wildlife (warm water fishery)". See, R-18-11-101, and Appendix B of Title 18, Chapter 11, Article 1, of Arizona Administrative Rules and Regulations.

In September 1993, EPA disapproved the lack of the "fish consumption" (FC) use for water bodies which Arizona designated as having an "aquatic and wildlife" use. For the standards to be approvable, EPA stated that the State must either revise its standards to include the FC use, or submit "use attainability analyses" (UAAs) for the subject waters. A UAA is a scientific assessment showing whether it is feasible to attain a particular use. See, 40 CFR 131.3(g) and 131.10(j).

ADEQ subsequently completed UAAs showing that it need not designate the FC use for those effluent dominated or ephemeral waters which it had not already designated as having the FC use. EPA approved those UAAs in November 1995.

In December 1995, ADEQ proposed to revise its standards to add the FC use to waters within the State which have the "aquatic and wildlife (cold water fishery)" or "aquatic and wildlife (warm water fishery)" use. See, 1 Ariz. Admin. Reg. 2811 (Dec. 29, 1995), proposed R-18-11-104 and Appendix B of Title 18, Chapter 11, Article 1, of Arizona Administrative Rules and Regulations.

In January 1996, EPA proposed to designate the fish consumption use for those waters which Arizona had designated as having an "aquatic and wildlife" use, in those cases where the requirements for completing a UAA had not been met. The affected stream segments and water bodies were listed in proposed section 131.31(c). Each of the affected waters were, at the time of EPA's proposal, designated by Arizona as having the "aquatic and wildlife

(cold water fishery)" or "aquatic and wildlife (warm water fishery)" use.

With the exception of fifteen waterbodies, Arizona's April 1996 final rulemaking established the FC use for all the waterbodies subject to EPA's proposal.

EPA is not promulgating a Federal rule designating the FC use for those waters which now have that designated use under Arizona's rules. In addition, EPA is not promulgating a Federal rule designating the FC use for Quarter Circle Bar Tank. EPA has determined that that waterbody is located within the boundaries of the Navajo Reservation and this rulemaking only applies to waters within the jurisdiction of the State of Arizona. The spelling of two waterbodies has been corrected in the final rule.

On April 3 and April 10, 1996, ADEQ submitted UAAs in support of its determination not to designate the FC use for eleven of the fourteen State waterbodies listed in EPA's proposal which did not receive the FC use designation under Arizona's April 1996 rulemaking. EPA is currently reviewing the analyses provided by the State. In accordance with Region 9 practice in this area, the Region has also sent out the new analyses for public review and comment to persons and organizations with interests related to water quality standards determinations in Arizona. EPA has asked for comments by May 15, 1996. ADEQ intends to submit a UAA in support of its determination not to designate the FC use for the three remaining waterbodies (Davidson Canyon and Tinaja Wash in the Santa Cruz River Basin, and Chase Creek in the Upper Gila River Basin) listed in EPA's proposed rule. EPA, Region 9, will send out that UAA for public review and comment.

Because EPA is under court order to promulgate this regulation by the end of April, and the State submitted UAAs with insufficient time for the Agency to adequately review the documentation and solicit public comment prior to its court-ordered deadline, EPA is promulgating the fish consumption use designation for waterbodies identified in EPA's proposal which do not now have the FC designated use. Should EPA approve, after completing its review of the UAAs and public comments, the State's determination that attaining the FC use is not feasible with respect to a waterbody listed in today's rule, EPA will proceed expeditiously to withdraw the revised use designation contained in section 131.31(c) with respect to that waterbody. If EPA approves the State's UAA prior to the effective date of this rule with respect to a waterbody listed

in section 131.31(c), EPA intends to stay the effectiveness of the Federal use designation with respect to that waterbody pending withdrawal of that part of the rule by EPA.

EPA received a number of comments opposing provisions of the proposed rule relating to fish consumption. One commenter submitted extensive comments objecting to EPA's proposal to promulgate the FC designated use, particularly with respect to the segment of the Salt River from the I-10 bridge to the 23rd Avenue WWTP discharge. The commenter contended that EPA should not have disapproved the lack of the FC use on waters designated by Arizona as having the aquatic and wildlife (warm water fishery) use. The commenter stated that EPA's disapproval did not explain how the Arizona standards were inconsistent with section 101(a)(2) of the Act, that EPA's reliance upon 40 CFR 131.10(j)(1) in its disapproval was inappropriate, and that a UAA was not required in order to avoid designating the FC use for the subject waters. The commenter stated that EPA rules and guidance documents do not require a FC designated use if other water quality standards are sufficient to protect the health of persons who may consume harvested aquatic life, and that the Act does not require a specific FC use for any waters at all. This commenter further stated that EPA has generated no evidence to support its hypothesis that the aquatic and wildlife (warm water fishery) designated use is not sufficient for the minimal harvesting of edible aquatic life that could potentially occur on the Salt River segment between the I-10 Bridge and the 23rd Avenue wastewater treatment plant. The commenter stated that Arizona's use designations and criteria, taken as a whole, are entirely "consistent" with the goals of the CWA, and that consistency is all that is required in light of 40 CFR 131.5 and 131.6. The commenter stated that the CWA and Arizona law require protection of only those uses that are actually occurring or are reasonably foreseeable, and that EPA erroneously assumed in this case that the Act requires the FC use found in the Arizona water quality standards to apply to all river segments regardless of local environmental conditions, the degree and types of harvesting by humans, and the types of aquatic life in the riverbed.

EPA continues to believe that EPA Region 9's disapproval of the absence of fish consumption use designations for certain waterbodies was consistent with the requirements of the CWA. EPA regulations regarding use designations provide that a State "must conduct a use

attainability analysis as described in 40 CFR 131.3(g) whenever the State designates or has designated uses that do not include the uses specified in section 101(a)(2) of the Act." 40 CFR 131.10(j)(1). Section 101(a)(2) of the CWA provides that water quality "shall provide for the protection of fish, shellfish, wildlife and recreation in and on the water", and, in EPA's view, the "protection" of fish, shellfish, and recreation necessarily includes ensuring that fish are not so contaminated that they are unhealthful for human consumption. Nonetheless, the State had failed to include designated uses that would protect such aquatic life for purposes of human consumption, or to perform a UAA demonstrating that this use was not attainable. EPA, Region 9, therefore appropriately concluded that the State's standards were not "consistent with" the goals of the CWA. Finally, while this commenter asserts that a FC designated use is not necessary if other standards are sufficient to protect the health of persons, the State has not contended that it has adopted criteria applicable to these waters that would protect human health. The State's existing water quality criteria were derived to protect aquatic life itself, not humans who consume it. Unlike aquatic life criteria, human health criteria take into account many factors that must be considered to ensure that pollutant residues in fish, when consumed by humans, do not result in adverse health effects. See generally 40 CFR Part 132, Appendices A and C, 60 FR 15393-15411 (March 23, 1995) (containing methodologies for deriving aquatic life and human health criteria for the Great Lakes Basin). EPA therefore believes that there is not a reasonable basis to conclude that the State's aquatic life criteria will provide protection for persons consuming fish from these specified waterbodies.

This commenter apparently also would seek to place the burden on EPA Regions to demonstrate that existing uses and criteria are not adequate to protect human health, taking into account local environmental conditions and consumption patterns, prior to disapproving state standards that fail to include the uses reflected in section 101(a)(2) of the Act. This position ignores the fact that, under EPA regulations, a UAA is the appropriate mechanism by which States can determine whether local environmental conditions and other factors justify the absence of a use otherwise meriting protection under the Act. Turning this process on its head and requiring EPA, which has far less familiarity with local

circumstances and conditions than does the State agency, to make these determinations would be impracticable and would significantly undermine the health protection goals of the Act. Finally, the issue in Arizona was not whether the State had reasonably concluded that existing standards for these waterbodies would protect human health. Rather, it was the State's failure to adopt standards protecting human health that precipitated the Region's disapproval action.

One commenter stated that, even if an additional use designation were necessary and supported by an administrative record, EPA has failed to promulgate scientifically supportable, reasonable and necessary numeric criteria to protect the use. The commenter stated that the CWA requires numeric criteria only for those toxic pollutants for which criteria have been published under section 304(a) of the CWA, the discharge or presence of which in the affected waters could reasonably be expected to interfere with those designated uses adopted by the State, as necessary to support such designated uses, and that EPA has not conducted the analysis required by this section to determine what numeric criteria would be appropriate to support the new FC use on the affected surface waters. The commenter stated that there is no administrative record to support EPA's FC use and associated numeric criteria for all surface waters, and that EPA should have considered whether any of the surface waters potentially subject to the new FC use would be entitled to a modification of the use on the basis of the factors in 40 CFR 131.10(g). The commenter also stated that the social and economic impact of the FC designations would be severe in Phoenix, noting that some of the Phoenix storm water outfalls discharge into the Salt River segment that would be reclassified under the proposed rule. The commenter stated that the proposed rule could have a substantial impact on storm water discharges and substantially increase costs to the public without any demonstrated improvement in public health. The commenter further stated that the upgrading of the Salt River and other segments with the FC use could also have a ripple effect that would result in more costly standards for upstream ephemeral segments, noting that Arizona water quality standards appear to require that designated uses for upstream segments shall not cause a violation of water quality standards in downstream segments, and that economic impact of the proposed FC use could spread

upstream to ephemeral waters that clearly do not warrant the FC use.

The comments regarding the appropriateness of criteria that will now apply to these waterbodies appear to indicate that commenters have misunderstood EPA's action. The State has itself adopted criteria that it believes are appropriate for providing protection of persons consuming fish from many State waters. EPA is not second-guessing this determination by the State. EPA also disagrees that it was under a duty to evaluate the attainability of the fish consumption use taking into account the factors in 40 CFR 131.10(g). Again, under EPA regulations, States have the opportunity and responsibility for conducting UAAs to demonstrate that uses consistent with the goals of the CWA are not attainable. The State had failed to do so here. EPA therefore was within its authority to determine that the use designations needed to be revised to be consistent with the goals in CWA section 101(a)(2). The State remains free to determine, based on local environmental conditions or the costs that it determines could be associated with the revised use designations, to downgrade use designations in accordance with 40 CFR 131.10(g). No commenters provided information during the public comment period indicating that, in fact, the revised use designations were not attainable according to the criteria contained in section 131.10(g).

Another commenter also questioned whether the segment of the Salt River from the I-10 bridge to the 23rd Avenue WWTP discharge should be designated as having the fish consumption use. The commenter stated that, if EPA's rationale for promulgating the fish consumption use is simply because the stream segment had been designated by Arizona as having the "aquatic and wildlife (warm water fishery)" use, then the process and rationale for designating the segment is suspect and should be reviewed.

Another commenter stated that the fish consumption designated use should not be presumptively applied to all water bodies, and should be applied only when it is shown that fishing is a legal, continuous, and widespread use of a particular water body. The commenter objected to allowing the addition of designated uses to a stream segment without the requirement to make any particular showing while the removal of a use may take place only after a comprehensive use attainability analysis which is often beyond the financial or technical capability of the individuals most directly affected by the inappropriately designated use.

Another commenter sought clarification that EPA's designation of the fish consumption use would be limited to water bodies which are waters of the United States.

As explained previously, EPA believes that it was appropriate and consistent with the requirements and goals of the CWA to promulgate fish consumption use designations where the State has designated the waters as supporting aquatic life. EPA disagrees that the CWA places a burden on EPA or States to demonstrate legal, widespread and continuous use of a waterbody before adopting a FC use designation. No such restriction is evident in the language or legislative history of the CWA. To support a particular use designation, it is sufficient that such a use be attainable in the waterbody. Regarding the use designation for the Salt River from the I-10 bridge to the 23rd Avenue WWTP discharge, that segment is not addressed by today's rule since the State adopted the FC use for this waterbody. See, R-18-11-101, and Appendix B of Title 18, Chapter 11, Article 1, of Arizona Administrative Rules and Regulations, as filed on April 24, 1996.

The one commenter is correct that the revised use designations only apply to waters that meet the definition of waters of the United States.

## *2. Water Quality Criteria Protective of Wildlife for Mercury*

Arizona has established numeric criteria for mercury for "aquatic and wildlife", "fish consumption", "domestic water source" and other uses designated for its waters. See, Appendix A of Title 18, Chapter 11, Article 1, of Arizona Administrative Rules and Regulations. As part of its consultation with EPA regarding Arizona's water quality standards pursuant to section 7 of the Endangered Species Act, the U.S. Fish and Wildlife Service (FWS) determined that Arizona's mercury criteria for protection of aquatic and wildlife uses were developed without consideration of bioaccumulative effects for predatory wildlife, and the FWS identified the adoption of mercury criteria protective of wildlife as a means to remove jeopardy to endangered and threatened species in the context of the Endangered Species Act.

Based upon FWS's determinations, EPA, Region 9, in April 1994 disapproved Arizona's lack of water quality criteria protective of wildlife for mercury.

While the FWS identified the adoption of a mercury criterion protective of wildlife as a reasonable and prudent alternative to avoid

jeopardizing endangered and threatened wildlife species, further discussions between EPA, ADEQ, Arizona Game and Fish Department, and the FWS led to the development of an alternative program to address the problem of mercury's impacts on endangered and threatened species. The Service indicated its overall approval of this approach to dealing with the problem of mercury as it relates to the protection of wildlife and, on January 17, 1996, revised its determination which initially identified adoption of a mercury criterion as a reasonable and prudent alternative for removing jeopardy to endangered species. Accordingly, in January 1996, EPA proposed section 131.31(f) to address the deficiency in the State's standards related to mercury's effect on wildlife, and solicited comment upon EPA's intent to implement a monitoring and source identification program to assist EPA in implementing Arizona's narrative toxicity criteria.

ADEQ has continued to participate, with EPA, Region 9, and the U.S. Fish and Wildlife Service, in the development of an interim program to protect predatory wildlife from mercury until appropriate numeric criteria can be developed. The program developed by the agencies is described in "Arizona Priority Pollutant Sampling Program, ADEQ/AGFD/USFWS/USEPA Cooperative Program", March 29, 1996. Under that program, ADEQ, in cooperation with the Arizona Game and Fish Department, the U.S. Fish and Wildlife Service, and EPA will conduct a tissue monitoring program to assess the magnitude and extent of mercury bioaccumulation in the prey base of the bald eagle and other fish-eating birds in Arizona. This monitoring program identifies further actions related to sampling, source identification, and remedy selection which the agencies will undertake if mercury levels in fish are found above a specified action level.

EPA received comment upon its proposal to adopt section 131.31(f) and upon the monitoring and source identification program identified in the Federal Register notice. A commenter stated that, even with the implementation procedures proposed by EPA, Arizona's narrative toxicity criteria would not protect against food chain accumulation in birds and other fish-eating species. The commenter contended that there was no deadline for completion of the monitoring and stated that there is no need to wait for further fish tissue monitoring because recent tests in certain lakes have found mercury levels exceeding the 0.1 mg/kg level identified under the proposed

monitoring program as the trigger for further control efforts. The commenter also noted that a mercury criterion to protect against food chain accumulation has been established for the Great Lakes, and that a similar criterion could be developed for Arizona. The commenter stated that the Arizona criterion might differ if there were evidence that mercury uptake rates among Arizona fishes are markedly different than among Great Lakes fishes, but that EPA has offered no evidence to suggest this is so.

EPA's long-term goal is the adoption of a mercury criterion for wildlife. However, despite the claims by the commenter, the data currently are not available to derive a mercury criterion for wildlife in Arizona using the methodology developed for the Great Lakes. A detailed discussion of the data needed to develop a criterion is discussed below. In lieu of a numeric criterion, EPA believes that the approach of using Arizona's narrative criterion in R18-11-108 for toxicity in combination with the implementation of the tissue monitoring program will satisfy the requirements of the CWA to provide protection of designated uses, including wildlife protection and propagation.

With regard to the commenter's general point regarding the necessity of having numeric criteria in order to meet the requirements of the CWA, it should be emphasized that the absence of a numeric criterion for a specific pollutant is not unusual. EPA has not published criteria guidance for the protection of aquatic life for all pollutants. To account for this unavoidable absence of numeric criteria for all pollutants, States include narrative criteria as part of their standards. Narrative criteria are intended to cover all pollutants and endpoints for which the state has not adopted numeric criteria. The role of narrative criteria in the CWA's regulatory program is evident in EPA's permitting regulations which include explicit provisions requiring permit limits to ensure narrative criteria are not exceeded. 40 CFR 122.44(d)(1)(vi).

In addition, the commenter was concerned that there was no deadline for completion of the tissue monitoring program. However, sampling will commence in the spring of 1996 and continue through the year 2000. The FWS biological opinion, and the FWS's revised determination regarding reasonable and prudent alternatives, are included in the administrative record for this rulemaking.

The purpose of the tissue monitoring program is to provide information that

can be used to assist in evaluating the magnitude of mercury contamination of wildlife in Arizona. The monitoring program was developed in consultation with the FWS, ADEQ, and Arizona Game and Fish Department. EPA believes the sampling program is a reasonable first step for identifying those areas in the State where problems may exist and for designing control strategies that will help remediate such problems to benefit wildlife protection in Arizona. The program will assist EPA in determining whether contaminated fish species are isolated cases due to particular sources of pollution (in which case development of permit limits for a particular discharger based on the State's existing narrative criterion may be the best means of remedying the problem) or whether they are indicative of a larger State-wide problem which needs to be addressed (potentially based on state-wide numeric criteria, when development of such criteria are technically feasible). If during the tissue monitoring it is determined that the mercury tissue levels are consistently found above the action level of 0.1 mg/kg in the prey base of bald eagle or Yuma clapper rail, then steps will be taken to identify the sources of the contamination and identify possible corrective measures.

EPA is concerned with the elevated mercury levels at the waterbodies identified by the commenter. While neither of the two lakes specifically cited by the commenter were identified by FWS as priority water bodies for sampling for mercury for threatened and endangered species, EPA is seeking to identify the sources contributing to the mercury levels detected in the two lakes and corrective measures for them.

The commenter is correct that a methodology for deriving wildlife criteria and a mercury criterion for wildlife were recently established in the Great Lakes Water Quality Initiative ("GLI"). It is important to note that the GLI wildlife methodology and criteria were developed over several years with input from two national conferences and several consultations with EPA's Science Advisory Board along with over 5000 public comments on the proposed GLI. In addition to the large effort undertaken to develop the methodology and criteria, EPA stated very clearly in the Supplementary Information Document to the GLI that:

EPA would like to reemphasize that the provisions in the proposed and final Guidance are expressly applicable only to the waters of the Great Lakes System \* \* \* States or Tribes with waters outside the Great Lakes Systems, in whole or in part, are encouraged to implement any of the

Guidance methodologies or procedures that are scientifically and technically appropriate for their situations. Supplementary Information Document, p. 82.

EPA believes the methodology used in the GLI for deriving a mercury wildlife criteria may be appropriate for use in Arizona with some modifications based on the specific conditions in Arizona. This does not mean, however, that a criterion can simply be developed using the data from the Great Lakes. In addition, the commenter implies that the only question which needs to be considered when applying the GLI methodology is whether the mercury uptake rates among Arizona fishes are markedly different than among Great Lakes fishes. In fact, the bioaccumulation potential is only one component that goes into the derivation of wildlife criteria.

ADEQ reviewed the GLI methodology for deriving wildlife criteria to evaluate its applicability to Arizona and submitted their comments to EPA on May 12, 1995, which are part of the administrative record. EPA agrees with ADEQ that ecological conditions differ in Arizona from the Great Lakes region. Therefore direct application of the GLI methodology without modification is probably not appropriate. Development of a wildlife criterion to protect wildlife from mercury in Arizona will likely require the completion of tasks analogous to those undertaken by EPA in the GLI. This effort is necessary because several components within the wildlife methodology are specific to the type of aquatic ecosystem and associated wildlife species. It would not be scientifically defensible to directly adopt the mercury wildlife criterion for the Great Lakes in the regulation of Arizona ecosystems without further analyses to support such a decision. Issues that will require further data evaluation and analyses include: (1) The establishment of representative wildlife species for aquatic ecosystems in Arizona, including a determination of their water and food intake rates and the prey that comprises their diets; (2) a determination of appropriate mercury toxicity thresholds for the representative wildlife species identified for Arizona ecosystems; and (3) the establishment of mercury bioaccumulation factors appropriate for Arizona ecosystems and their associated food chains.

The technical analyses needed to establish the representative species (and their associated attributes) and appropriate mercury bioaccumulation factors will likely require the largest effort because these items are most closely associated with the site-specific nature of wildlife criteria. In addition to

the data evaluation and analyses, peer review would be appropriate for any wildlife methodology and associated criteria developed in Arizona given the numerous technical and scientific issues involved in developing such a methodology.

In summary, while EPA believes the development of a wildlife criterion for mercury may be possible, with some modifications, using the methodology developed in the GLI, the data to support the development of such a criterion are not currently available. Therefore, until this information is collected, EPA believes the approach of relying on the narrative criterion combined with the tissue monitoring program will provide protection of wildlife in a manner consistent with the requirements of the Endangered Species Act and Clean Water Act.

EPA is continuing to evaluate the comments upon the substance of the monitoring program, for the purpose of determining whether modifications to the program are warranted.

Another commenter indicated that EPA's disapproval of Arizona's lack of water quality criteria protective of wildlife for mercury should have been limited to the need for a mercury criterion applicable to only those surface waters where affected endangered species are likely to be adversely impacted.

EPA's disapproval action was based upon the biological opinion issued by the FWS, which found that the State's existing criteria for mercury failed to consider the effects of bioaccumulation of pollutants on wildlife. Because bioaccumulative effects may extend beyond threatened and endangered species to other species of wildlife, EPA's disapproval appropriately extended to Arizona's waters generally.

#### D. Summary of Provisions in Proposal Not Included in Final Rule

##### 1. Mining Exclusion

In September 1993, EPA, Region 9, disapproved the exclusion related to mining contained in the State's standards at Arizona Administrative Rules and Regulations, R18-11-103.2. That exclusion provided that Arizona's standards did not apply to certain impoundments and associated ditches and conveyances used in the extraction, beneficiation and processing of metallic ores.

In EPA's January 1996 Federal Register notice of proposed rulemaking, EPA sought comment on a proposed Federal rule that would adopt standards for any waters of the United States not governed by State standards due to R18-

11-103.2, as that State rule then existed. In the preamble to the proposed Federal rule, EPA also solicited comment regarding revisions to R18-11-102 that the State had proposed in December 1995 regarding the applicability of its standards to impoundments and associated ditches and conveyances used in the extraction, beneficiation and processing of metallic ores.

In April 1996 Arizona repealed R18-11-103 in its entirety and revised R18-11-102 by, among other things, adding provisions related to the applicability of the State's standards to mining-related impoundments. R18-11-102 as promulgated differs in certain respects from the proposed revision upon which EPA sought comment in its January 1996 Federal Register notice.

EPA has determined that Arizona's repeal of R18-11 103.2, and Arizona's adoption of revisions to R18-11-102 regarding the applicability of the State's standards to certain impoundments and associated ditches and conveyances, are consistent with the CWA, and that a Federal rule with respect to such impoundments and associated ditches and conveyances is not therefore needed to meet the CWA's requirements. EPA believes that the State's revision to R18-11-103.2 adequately addresses EPA's concerns because it excludes from standards only those waters that are not waters of the United States. Accordingly, EPA is not promulgating the provision which it proposed regarding mining-related impoundments, and comments opposing the adoption of the proposed Federal rule are moot.

Other commenters objected to mining-related exclusions under consideration in Arizona's rulemaking or encouraged adoption of a Federal rule in order to clarify the applicability of water quality standards to mining-related activities. One commenter supported the application of water quality standards to surface water bodies that have been converted into mining impoundments. The commenter also indicated that EPA's rule should address the extent to which water quality standards are applicable in cases involving stream diversions and the placement of mining wastes in dammed creek beds or valleys. The commenter indicated its support for broadening the protections associated with water quality standards to cover impoundments built in the drainages of diverted water bodies. Another commenter suggested that uncertainty would be created if Arizona adopted the mining-related revisions then under consideration. The commenter noted that it would be difficult for persons to determine whether the particular

conditions for exempting water bodies under Arizona's proposal had been met. The commenter suggested that accuracy and simplicity might be better served by deleting the State's mining impoundment exemption. EPA considered these comments prior to determining that Arizona's final rulemaking with respect to mining impoundments is consistent with the CWA and that a Federal rule is unneeded.

Under section 303 of the CWA, States must adopt standards for all waters of the United States within the State. See, *Kentucky v. Train*, 9 ERC 1280, 1281 (E.D. Ky. 1976). States, however, need not adopt standards for any water body which is not a water of the United States. EPA has defined waters of the United States to include, among other waters, rivers and streams the use, degradation, or destruction of which would affect or could affect interstate commerce; impoundments of such waters are also waters of the United States. See, 40 CFR 122.2 and 40 CFR 230.3(s). Accordingly, EPA's disapproval was based on the premise that Arizona must adopt standards governing mining impoundments which are waters of the United States. In the view of EPA, Region 9, the State's revised mining language accords with the CWA because only impoundments that are not waters of the United States will not be subject to standards. EPA agrees that additional guidance addressing the extent to which water quality standards are applicable in cases noted by the commenters is desirable.

##### 2. Practical Quantitation Limits

At the time of EPA's actions disapproving portions of Arizona's water quality standards, Arizona had prescribed practical quantitation limits (PQLs) in the regulations establishing its water quality standards. See, R18-11-120, and Appendix C of Title 18, Chapter 11, Article 1, of Arizona Administrative Rules and Regulations (1992). Under Arizona's regulations, "practical quantitation limit means the lowest level of quantitative measurement that can be reliably achieved during routine laboratory operations." R18-11-101.37. In September 1993, EPA, Region 9, disapproved Arizona's inclusion of the PQLs in its regulations. EPA, Region 9, stated that, in order for the standards to be approvable under CWA section 303(c), they must protect the designated uses and must not be compromised by constraints related to analytical methods. EPA, Region 9, further stated that Arizona may choose to include the

PQLs in a policy or guidance document separate from the standards regulations.

In December 1995, ADEQ proposed deleting the PQLs prescribed in Appendix C from its regulations and adopting the PQLs in a guidance document. See, 1 Ariz. Admin. Reg. 2811 (Dec. 29, 1995), proposed R18-11-120.

In its January 1996 action, EPA proposed to adopt a Federal rule that would provide that Appendix C of Arizona's regulations would not be water quality standards for the purposes of the CWA.

In its April 1996 rulemaking, Arizona deleted Appendix C from its regulations. Accordingly, EPA is not promulgating a rule addressing this issue.

### 3. Implementation Policies

In September 1993, EPA disapproved the lack of implementation procedures for Arizona's narrative nutrient criteria. Arizona's narrative nutrient criteria provides that navigable waters shall be free from pollutants in amounts or combinations that cause the growth of algae or aquatic plants that inhibit or prohibit the habitation, growth or propagation of other aquatic life or that impair recreational uses. See, R18-11-108.A.6. At the time of the disapproval, Arizona had not adopted an implementation process for its narrative criteria.

Also in September 1993, EPA, Region 9, disapproved the lack of implementation procedures for Arizona's narrative toxicity criterion. Arizona's narrative toxicity criterion provides that navigable waters shall be free from pollutants in amounts or combinations that are toxic to humans, animals, plants and other organisms. See, R18-11-108.A.5. At the time of the disapproval, Arizona had not adopted implementation procedures for toxicity.

In its January 1996 proposal, EPA proposed to adopt a Federal rule to address these deficiencies in the State's standards. Proposed 40 CFR 131.31(e). In its January 1996 proposal, EPA also solicited comment regarding the Region's use of two policies to guide the Region's implementation of the subject narrative criteria: "EPA, Region 9, Policy for the Implementation of Arizona's Narrative Nutrient Criteria" and "EPA, Region 9, Policy on Using Biomonitoring to Implement Arizona's Narrative Toxicity Criterion". As noted in EPA's January 1996 Federal Register notice, EPA does not believe that it is necessary that the State itself adopt regulatory provisions addressing these implementation issues. EPA explained in the Federal Register notice that such

policies and procedures may be contained either in water quality standards regulations themselves, or may be included in a standards submission as policy or guidance documents. EPA also stated in its January 1996 preamble that, should the State adopt acceptable policies and procedures prior to promulgation of a final rule by EPA, the Agency would not include the subject regulatory provisions in the final rule.

In January 1996, Arizona adopted a policy for the implementation of the State's narrative criteria for nutrients. ADEQ, Water Quality Assessment Unit, "Implementation Guidelines for the Narrative Nutrient Standard". In April 1996, Arizona adopted a policy for the implementation of the State's narrative criteria for toxicity. ADEQ, "Interim Whole Effluent Toxicity Implementation Guidelines for Arizona".

After reviewing the State-adopted implementation policies and the comments received in response to the January 1996 Federal Register notice, EPA, Region 9, approved the policies adopted by the State. With respect to EPA's prior disapproval of Arizona's standards due to the lack of implementation policies related to narrative criteria for nutrients and toxicity, EPA has determined that Arizona's water quality standards, as supplemented by the State's newly adopted implementation plans, are consistent with the CWA and that no new Federal water quality standard is necessary to meet the CWA's requirements. Accordingly, EPA is not promulgating proposed 40 CFR 131.31(e).

EPA received comments regarding its implementation policies in response to the January 1996 Federal Register notice. Because EPA has approved Arizona's implementation policies, and therefore not promulgated a final rule related to these policies, those comments are no longer relevant to this rulemaking action. However, those comments regarding EPA's policies that are material to EPA's decision to approve Arizona's policies have been considered by the Agency in its approval action and responses to those comments have been prepared and are part of the record supporting EPA's approval of Arizona's narrative toxicity and narrative nutrient standards implementation policies. A number of comments having to do with the appropriateness of adopting Federal implementation policies, or the necessity of having State policies, are moot since the State has now adopted its own implementation policies. Other comments received were specific to

EPA's own toxicity policy for Arizona ("EPA, Region 9, Policy on Using Biomonitoring to Implement Arizona's Narrative Toxicity Criterion"). These comments addressed the purpose and function of toxicity requirements in permits. Since Arizona's toxicity policy does not address how the narrative toxicity standard will be implemented in permits, these comments have not been responded to in EPA's action approving the Arizona toxicity policy. EPA will take these comments into account as we further refine the implementation of toxicity narrative standards in National Pollutant Discharge Elimination System permits in Arizona.

### E. Endangered Species Act

Pursuant to section 7 of the Endangered Species Act (16 U.S.C. 1656 *et seq.*), Federal agencies must assure that their actions are unlikely to jeopardize the continued existence of listed threatened or endangered species or adversely affect designated critical habitat of such species. Today's action adds the fish consumption use to various waters which previously did not have the protections afforded by that designation, and establishes that a monitoring program will be undertaken to implement the State's narrative water quality criteria with respect to the effects of mercury on wildlife.

EPA has completed section 7 consultation with the FWS regarding this action.

### F. Executive Order 12866

Under Executive Order 12866 (58 FR 51735, October 4, 1993) the Agency must determine whether the regulatory action is "significant" and therefore subject to Office of Management and Budget (OMB) review and the requirements of the Executive Order. The Order defines "significant regulatory action" as one that is likely to result in a rule that may:

- (1) Have an annual effect on the economy of \$100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, of State, local, or tribal governments or communities;
- (2) Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- (3) Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs of the rights and obligations of recipients thereof; or
- (4) Raise novel legal or policy issues arising out of legal mandates, the



President's priorities, or the principles set forth in the Executive Order.

Because the annualized cost of this final rule would be significantly less than \$100 million and would meet none of the other criteria specified in the Executive Order, it has been determined that this rule is not a "significant regulatory action" under the terms of Executive Order 12866, and is therefore not subject to OMB review.

#### G. Executive Order 12875, Enhancing the Intergovernmental Partnership

In compliance with Executive Order 12875 EPA has involved state, local, and tribal governments in the development of this rule. EPA, Region 9, consulted with ADEQ through conference calls, meetings and review of draft and final documents. EPA held a meeting on December 14, 1995, in Phoenix, AZ, with members of the potentially impacted public (e.g., municipalities, industries and environmental groups) to discuss the proposed action. EPA held a public hearing on the proposed action on February 29, 1996.

#### H. Regulatory Flexibility Act

The Regulatory Flexibility Act (5 U.S.C. 601 *et seq.*) requires EPA to assess whether its regulations create a disproportionate effect on small entities. Among its provisions, the Act directs EPA to prepare and publish an initial regulatory flexibility analysis (IRFA) for any proposed rule which may have a significant impact on a substantial number of small entities. For purposes of this rulemaking, small entities are small dischargers, whether industrial or municipal.

Pursuant to section 605(b) of the Regulatory Flexibility Act (5 U.S.C. 605(b)), the Administrator certifies that this rule will not have a significant economic impact on a substantial number of small entities. This rule is limited to the designation of the fish consumption use for fourteen waters within Arizona, and the requirement that EPA or Arizona implement a monitoring program to assess attainment of a specified State-adopted water quality standard. In light of the limited geographic scope of the use designations included in the final rule adopted by EPA (i.e., fourteen waterbodies), the Agency does not believe that there will be significant impacts associated with this aspect of the rule. The mercury monitoring program, moreover, will be carried out by EPA and ADEQ, and does not itself impose any additional obligations on small entities.

#### I. Unfunded Mandates Reform Act

Title II of the Unfunded Mandates Reform Act of 1995 (UMRA), Public Law 104-4, establishes requirements for Federal agencies to assess the effects of their regulatory actions on State, local, and tribal governments and the private sector. Under section 202 of the UMRA, EPA generally must prepare a written statement, including a cost-benefit analysis, for proposed and final rules with "Federal mandates" that may result in expenditures to State, local, and tribal governments, in the aggregate, or to the private sector, of \$100 million or more in any one year. Before promulgating an EPA rule for which a written statement is needed, section 205 of the UMRA generally requires EPA to identify and consider a reasonable number of regulatory alternatives and adopt the least costly, most cost-effective or least burdensome alternative that achieves the objectives of the rule. The provisions of section 205 do not apply when they are inconsistent with applicable law. Moreover, section 205 allows EPA to adopt an alternative other than the least costly, most cost-effective or least burdensome alternative if the Administrator publishes with the final rule an explanation why that alternative was not adopted. Before EPA establishes any regulatory requirements that may significantly or uniquely affect small governments, including tribal governments, it must have developed under section 203 of the UMRA a small government agency plan. The plan must provide for notifying potentially affected small governments, enabling officials of affected small governments to have meaningful and timely input in the development of EPA regulatory proposals with significant Federal intergovernmental mandates, and informing, educating, and advising small governments on compliance with the regulatory requirements.

As noted above, this rule is limited to the designation of the fish consumption use for fourteen waters within Arizona, and the requirement that EPA or Arizona implement a monitoring program to assess attainment of a State-adopted water quality standard. EPA has determined that this rule contains no regulatory requirements that might significantly or uniquely affect small governments. EPA has also determined that this rule does not contain a Federal mandate that may result in expenditures of \$100 million or more for State, local, and tribal governments, in the aggregate, or the private sector in any one year. Thus, today's rule is not subject to the requirements of sections 202 and 205 of the UMRA.

#### J. Paperwork Reduction Act

This action requires no information collection activities subject to the Paperwork Reduction Act, and therefore no information collection request (ICR) will be submitted to the Office of Management and Budget (OMB) for review in compliance with the Paperwork Reduction Act, 44 U.S.C. 3501 *et seq.*

#### List of Subjects in 40 CFR Part 131

Environmental protection, Water pollution control, Water quality standards, Toxic pollutants.

Dated: April 29, 1996.

Carol M. Browner,  
Administrator.

For the reasons set out in the preamble, part 131 of title 40 of the Code of Federal Regulations is amended as follows:

#### PART 131—WATER QUALITY STANDARDS

1. The authority citation for part 131 continues to read as follows:

Authority: 33 U.S.C. 1251 *et seq.*

#### Subpart D—[Amended]

2. Section 131.31 is amended by adding paragraphs (b), and (c), to read as follows:

#### § 131.31 Arizona.

\* \* \* \* \*

(b) The following waters have, in addition to the uses designated by the State, the designated use of fish consumption as defined in R18-11-101 (which is available from the Arizona Department of Environmental Quality, Water Quality Division, 3033 North Central Ave., Phoenix, AZ 85012):

COLORADO MAIN STEM RIVER BASIN:

Hualapai Wash

MIDDLE GILA RIVER BASIN:

Agua Fria River (Camelback Road to Avondale WWTP)

Galena Gulch

Gila River (Felix Road to the Salt River)

Queen Creek (Headwaters to the Superior WWTP)

Queen Creek (Below Potts Canyon)

SAN PEDRO RIVER BASIN:

Copper Creek

SANTA CRUZ RIVER BASIN:

Agua Caliente Wash

Nogales Wash

Sonoita Creek (Above the town of Patagonia)

Tanque Verde Creek

Tinaja Wash

Davidson Canyon

UPPER GILA RIVER BASIN



## Chase Creek

(c) To implement the requirements of R18-11-108.A.5 with respect to effects of mercury on wildlife, EPA (or the State with the approval of EPA) shall implement a monitoring program to assess attainment of the water quality standard.

[FR Doc. 96-11080 Filed 5-6-96; 8:45 am]

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