

**ENVIRONMENTAL PROTECTION AGENCY**

[OW-FRL-6147-1]

**Water Quality Criteria****Notice of Ambient Water Quality Criteria****AGENCY:** Environmental Protection Agency (EPA).**ACTION:** Notice of updated recommended aquatic life criteria for ammonia in freshwater, and request for comments.

**SUMMARY:** Pursuant to Section 304(a)(1) of the Clean Water Act, the Environmental Protection Agency (EPA) announces the publication and availability of a document 1998 Update of Ambient Water Criteria for Ammonia, and requests comment on this document. The document contains EPA's recommended ammonia criteria for the protection of freshwater aquatic life. These criteria are EPA's recommendations for States, Territories, and authorized Tribes to use as guidance in adopting water quality standards. Such standards may form the basis for establishing enforceable, water quality-based controls. These water quality criteria are not regulations, and do not impose legally-binding requirements on EPA, States, Territories, Tribes or the public. States, Territories and authorized Tribes on a case-by-case basis retain the discretion to adopt water quality standards that differ from these recommendations where appropriate. Although EPA is requesting comment on this document, these criteria constitute the Agency's current recommended Section 304(a)(1) criteria, and will continue to serve as such until EPA publishes a revision. Based on its assessment of public comments and other available information, EPA will either publish a revision to the guidance or will publish a notice indicating its decision not to revise.

**OBTAINING THE DOCUMENT:** Copies of the complete document, titled 1998 Update of Ambient Water Quality Criteria for Ammonia, may be obtained from EPA's Water Resource Center by phone at 202-260-7786, or by e-mail to [waterpubs@epamail.epa.gov](mailto:waterpubs@epamail.epa.gov), or by web browser at [www.epa.gov/ostwater/rescenter.html](http://www.epa.gov/ostwater/rescenter.html), or by conventional mail to EPA Water Resource Center, RC-4100, 401 M Street SW, Washington, DC 20460. Alternatively, consult [www.epa.gov/OST/pubs](http://www.epa.gov/OST/pubs) for download availability.

**EXAMINING THE ADMINISTRATIVE RECORD:** The Administrative Record supporting

this guidance document is available under docket number W-98-20 at the Water Docket, Room EB-57, Environmental Protection Agency, 401 M Street SW, Washington, DC 20460 on work days between 9 a.m. and 4 p.m. For access to docket materials call (202) 260-3027 to schedule an appointment. The record contains complementary material on current related work not included in the update document, as well as supplementary historical materials. A reasonable fee will be charged for photocopies.

**SUBMITTING COMMENTS:** An original and two copies of written comments should be submitted by October 2, 1998, and addressed to W-98-20, Ammonia Criteria Comment Clerk; Water Docket (MC-4101), U.S. EPA, 401 M Street SW, Washington, DC 20460. Comments may be submitted electronically in ASCII or Word Perfect 5.1, 5.2, or 6.1 formats to [OW-Docket@epamail.epa.gov](mailto:OW-Docket@epamail.epa.gov).

**SUPPLEMENTARY INFORMATION:****Background on Program**

Section 304(a)(1) of the Clean Water Act (33 U.S.C. 1314(a)(1)) authorizes EPA to publish and periodically update ambient water quality criteria. These criteria are to reflect the latest scientific knowledge on the identifiable effects of pollutants on public health and welfare, aquatic life, and recreation. These criteria serve as guidance to States, Territories, and authorized Tribes in developing water quality standards under Section 303(c) of the CWA, and ultimately provide a basis for controlling discharges or releases of pollutants. In this notice EPA is announcing the publication and availability of the Agency's most recent calculation of water quality criteria for ammonia.

Ambient water quality criteria developed under Section 304(a) are based solely on data and scientific judgments on the relationship between pollutant concentrations and effects on aquatic life, human health, and the environment. Section 304(a) criteria do not reflect consideration of economic impacts or the technological feasibility of meeting the chemical concentrations in ambient water.

**Background on Development of this Criteria Document**

In 1985, EPA published *Ambient Water Quality Criteria for Ammonia—1984*, which contained criteria concentrations for protection of freshwater aquatic life. The Criterion Maximum Concentration or CMC, which applied to short (acute) exposure, and the Criterion Continuous

Concentration or CCC, which applied to longer (chronic) exposure, varied with temperature, pH, and with the type of fishery involved. On July 30, 1992, EPA revised its recommended value for the CCC through a memorandum "Revised Tables for . . . Freshwater Ammonia Concentrations."

In late 1996 EPA undertook a review and revision of the CCC for ammonia, in response to public interest in the criterion. EPA produced a draft on June 5, 1997. EPA obtained a peer review, *Peer Review Report for EPA's Addendum to Ambient Water Quality Criteria Document for Ammonia*, dated October 9, 1997. After considering and responding to the peer review comments, EPA is in this notice publishing revised criteria recommendations, superseding all previous freshwater ammonia criteria. EPA will consider public comments on the material of this notice in determining the need for further revisions.

The document announced in this notice pertains only to fresh waters. It does not change or supersede the EPA criterion for ammonia in salt water, published in *Ambient Water Quality Criteria for Ammonia (Saltwater)—1989*.

EPA aquatic life criteria consist of acute and chronic criteria concentrations, applicable averaging periods, and allowable excursion frequencies. The document announced in this notice revises (a) the pH and temperature relationship of the CMC (acute criterion) based on re-evaluation of the data in the 1984/1985 criteria document, (b) the CCC (chronic criterion), including its pH and temperature relationship, based on new data in addition to what was available for the 1984/1985 document, and (c) the averaging period applicable to the CCC. The revisions do not address, and are not intended to modify (d) the averaging period applicable to the CMC, or (e) the recommended frequencies for excursions of the CMC or CCC.

**Ammonia Criteria Concentrations**

In natural waters ammonia exists in two forms, un-ionized NH<sub>3</sub>, and ionized NH<sub>4</sub><sup>+</sup>, with equilibrium controlled by temperature and pH. Whereas the 1984/1985 criteria were derived based on un-ionized ammonia, which required a relationship with temperature, the criteria published today are expressed only as total (un-ionized plus ionized) ammonia, the toxicity of which does not appear empirically to vary with temperature. Consequently, while the criteria published today vary with pH, they do not vary with temperature.

Based on differences in species acute sensitivity, different CMC values were derived for waters where salmonids (e.g., trout and salmon) are present and waters where salmonids are not present.

Such distinctions in species chronic sensitivity were not apparent, however. Consequently the CCC does not vary with the type of fish present. The criteria concentrations are shown in

Table 1. For brevity, only a few example pH values are shown here. Refer to the criteria document for the computational formula and for other example pH values between 6.5 and 9.0.

TABLE 1.—CMC AND CCC (MG N/L) AT A FEW EXAMPLE PH VALUES.

pH	CMC (salmonids present)	CMC (salmonids absent)	CCC
6.5	32.5	48.8	3.48
7.0	24.0	36.1	3.08
7.5	13.3	19.9	2.28
8.0	5.60	8.40	1.27
8.5	2.13	3.20	0.57
9.0	0.88	1.32	0.25

Whereas the 1984/1985 and 1992 total ammonia criteria were expressed in milligrams ammonia per liter (ammonia molecular weight 17.0306 daltons), the currently proposed criteria are expressed in milligrams ammonia nitrogen per liter (nitrogen molecular weight 14.0067 daltons). This change was suggested by criteria users. To compare the 1984/1985 and 1992 criteria to the currently proposed criteria, multiply the 1984/1985 or 1992 total ammonia values by 0.822.

#### Averaging Period

The ambient concentration, averaged over a period of 30 days, should not exceed the CCC. The ambient concentration, averaged over four days, should not exceed a concentration two times greater than the CCC.

The averaging period applicable to the CMC, one hour, was not addressed in this criteria update effort, and thus remains unchanged from 1984/1985.

#### Cold-Season Application

Because the costs of biological treatment of ammonia increase substantially as the water temperature drops, establishing the cold-season ammonia concentrations necessary for protecting aquatic life uses is of particular importance. Two factors affect the appropriateness of the above CCC during cold seasons. First, with respect to chronic toxicity of ammonia to fish, the most sensitive life stages are early life stages, which in many, but not all water bodies, do not occur in during the cold season. Second, for the most sensitive invertebrates, the toxicity of ammonia appears to decrease with decreasing temperature. For this reason, EPA has concluded that under some circumstances the cold-season CCC could be relaxed somewhat, although setting the appropriate criteria value involves uncertainties.

In light of the evidence available, EPA recommends the following risk management policies with regard to cold-season ammonia criteria:

- While the cold-season ammonia criterion may in some cases be different than the criterion applicable to other seasons, all periods of the year should be covered by some ammonia criterion.
- If a state, territory, or authorized Tribe can make a finding, for a site or ecoregion, that identifies a time of year when no sensitive life stages of any fish species are ordinarily present in numbers affecting the sustainability of populations, the criterion applicable to that time of year may be set up to 3-fold higher than the criterion applicable to the remainder of the year. Baseline and subsequent biological monitoring in accordance with currently available EPA guidance should be conducted to assure that the integrity of the aquatic community being protected is maintained when these higher cold-season concentrations are allowed.
- Alternatively, if a state, territory, or authorized Tribe can demonstrate, based on rigorous baseline and subsequent instream biological monitoring, that particular eco-regions can fully support beneficial fisheries uses, defined by appropriate biological measures, under the cold-season concentration regimes occurring at monitored sites in the ecoregion, then the cold-season criterion may be set more than 3-fold higher than the applicable criterion to accord with the results of such analysis. In judging the adequacy of the instream biological monitoring, EPA would rely on its May 1996 guidance "Biological Criteria, Technical Guidance for Streams and Small Rivers" (EPA 822-B-96-001) or later updates when they become available.

#### Endangered or Threatened Species

Because the criteria are generally designed to protect 95 percent of all fish

and aquatic invertebrate taxa, there remains a small possibility that the criteria will not protect all listed endangered or threatened species. Consequently, EPA recommends the following:

In adopting ammonia criteria for specific water bodies, States and Tribes may need to develop site-specific modifications of the criteria to protect listed endangered or threatened species, where sufficient data exist indicating that endangered or threatened species are more sensitive to a pollutant than the species upon which the criteria are based. Such modifications may be accomplished using either of the following two procedures: (1) If the CMC is greater than 0.5 times the Species Mean Acute Value for a listed threatened or endangered species, or a surrogate for such species, obtained from flow-through, measured-concentration tests, then the CMC should be reset equal to 0.5 times that Species Mean Acute Value. (The empirical factor 0.5 converts from a 50 percent lethality concentration to a minimal-lethality concentration.) If CCC is greater than the Species Mean Chronic Value of a listed threatened or endangered species or surrogate, then the CCC should be reset to that Species Mean Chronic Value. (2) The site-specific criteria may be calculated using the recalculation procedure for site-specific modifications described in Chapter 3 of the U.S. EPA Water Quality Standards Handbook, Second Edition—Revised (1994).

#### Issues for Public Comment

Because the ammonia CCC is so much lower than the CMC, the CCC is expected to be the basis for water quality-based controls much more often than is the ammonia CMC. EPA is therefore particularly interested in public comment addressing the scientific basis for the CCC. For comments addressing the CMC or its associated averaging period, EPA would find it helpful if the commenter would explain how the comment issue would affect water quality-based controls.

While welcoming all comments, EPA especially solicits additional data on the

chronic toxicity of ammonia to aquatic life, comments on the interpretation of data on ammonia-sensitive species such as fingernail clam, rainbow trout, bluegill, and Hyalella, field data relevant to effects and effect concentrations of ammonia under summer and winter conditions, and comments on the cold-season policy presented above.

Based on public comments and any other new information available, EPA will decide whether revision of the criteria is necessary. EPA will subsequently publish a notice indicating either its revised criteria recommendations, or its decision not to revise.

Dated: August 3, 1998.

**J. Charles Fox,**

*Acting Assistant Administrator for Water.*

[FR Doc. 98-22202 Filed 8-17-98; 8:45 am]

BILLING CODE 6560-50-P

## FEDERAL COMMUNICATIONS COMMISSION

### Notice of Public Information Collection(s) submitted to OMB for Review and Approval

August 10, 1998.

**SUMMARY:** The Federal Communications Commission, as part of its continuing effort to reduce paperwork burden invites the general public and other Federal agencies to take this opportunity to comment on the following information collection(s), as required by the Paperwork Reduction Act of 1995, Public Law 104-13. An agency may not conduct or sponsor a collection of information unless it displays a currently valid control number. No person shall be subject to any penalty for failing to comply with a collection of information subject to the Paperwork Reduction Act (PRA) that does not display a valid control number. Comments are requested concerning: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimate; (c) ways to enhance the quality, utility, clarity of the information collected; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated information techniques or other forms of information technology.

**DATES:** Written comments should be submitted on or before September 17, 1998. If you anticipate that you will be

submitting comments, but find it difficult to do so within the period of time allowed by this notice, you should advise the contact listed below as soon as possible.

**ADDRESSES:** Direct all comments to Les Smith, Federal Communications, Room 234, 1919 M St., NW., Washington, DC 20554 or via internet to lesmith@fcc.gov.

**FOR FURTHER INFORMATION CONTACT:** For additional information or copies of the information collections contact Les Smith at 202-418-0217 or via internet at lesmith@fcc.gov.

**SUPPLEMENTARY INFORMATION:**  
*OMB Approval Number:* 3060-0287.

*Title:* Section 78.69 Cable Relay Station Records.

*Form Number:* N/A.

*Type of Review:* Extension of a currently approved collection.

*Respondents:* Business and other for-profit entities.

*Number of Respondents:* 1,800.

*Estimated Time Per Response:* 26 hours.

*Frequency of Response:* Mandatory recordkeeping requirement.

*Total Annual Burden:* 46,800 hours.

*Cost to Respondents:* \$9,000

(Photocopying and stationery costs).

*Needs and Uses:* Section 78.69 requires that licensees of cable CARS stations maintain various records, including but not limited to records pertaining to transmissions, unscheduled interruptions to transmissions, maintenance, observations, inspections and repairs. Station records are required to be maintained for a period of not less than two years. The records kept pursuant to § 78.69 provide for a history of station operations and are reviewed by Commission staff during field investigations to ensure that proper operation of the stations is being conducted.

*OMB Approval Number:* 3060-0419.

*Title:* Sections 76.94, 76.95, 76.155, 76.156, 76.157 and 76.159 Syndicated Exclusivity and Network Non-Duplication Rights.

*Form Number:* N/A.

*Type of Review:* Extension of a currently approved collection.

*Respondents:* Business and other for-profit entities.

*Number of Respondents:* 5,392 (1,141 commercial television stations + 4,251 cable television stations).

*Estimated Time Per Response:* 0.5 - 2.0 hours.

*Frequency of Response:* Mandatory; On occasion reporting requirement; Third party disclosure.

*Total Annual Burden:* 178,640 hours.

*Cost to Respondents:* \$192,132 (Notification and disclosure requirements).

*Needs and Uses:* Sections 76.94(a) and 76.155(a) require television stations and program distributors to notify cable television system operators of non-duplication protection and exclusivity rights being sought. The notification shall include (1) the name and address of the party requesting non-duplication protection/exclusivity rights and the television broadcast station holding the non-duplication right; (2) the name of the program or series for which protection is sought; and (3) the dates on which protection is to begin and end.

Section 76.94(b) requires broadcasters entering into contracts providing for network non-duplication protection to notify cable systems within 60 days of the signing of such a contract. If they are unable to provide notices as provided for in § 74.94(a), they must provide modified notices that contain the name of the network which has extended non-duplication protection, the time periods by time of day and by network for each day of the week that the broadcaster will be broadcasting programs from that network, and the duration and extent of the protection.

Section 76.94(d) requires broadcasters to provide the following information to cable television systems under the following circumstances: (1) In the event the protection specified in the notices described in paragraphs (a) or (b) of this section has been limited or ended prior to the time specified in the notice, or in the event a time period, as identified to the cable system in a notice pursuant to paragraph (b) of this section, for which a broadcaster has obtained protection is shifted to another time of day or another day (but not expanded), the broadcaster shall, as soon as possible, inform each cable television system operator that has previously received the notice of all changes from the original notice. Notice to be furnished "as soon as possible" under this section shall be furnished by telephone, telegraph, facsimile, overnight mail or other similar expedient means. (2) In the event the protection specified in the modified notices described in paragraph (b) of this section has been expanded, the broadcaster shall, at least 60 calendar days prior to broadcast of a protected program entitled to such expanded protection, notify each cable system operator that has previously received notice of all changes from the original notice.

Section 76.155(d) requires that in the event the exclusivity specified in paragraph (a) of this section has been