

ENVIRONMENTAL PROTECTION COMMISSION[567]

Notice of Intended Action

Twenty-five interested persons, a governmental subdivision, an agency or association of 25 or more persons may demand an oral presentation hereon as provided in Iowa Code section 17A.4(1)“b.”

Notice is also given to the public that the Administrative Rules Review Committee may, on its own motion or on written request by any individual or group, review this proposed action under section 17A.8(6) at a regular or special meeting where the public or interested persons may be heard.

Pursuant to the authority of Iowa Code section 455B.173(2), the Environmental Protection Commission (Commission) hereby gives Notice of Intended Action to amend Chapter 61, “Water Quality Standards,” Iowa Administrative Code.

The purpose of the proposed amendments is to create additional flexibility for wastewater dischargers by adding the option to use the Biotic Ligand Model (BLM) to determine water quality criteria for copper. The amendments will also add the option to use the Water-Effect Ratio (WER) to adjust the existing water quality criteria for copper. These options have the potential to significantly reduce costs for permit holders that are unable to comply with the existing criteria for copper. Of the 297 facilities in Iowa that are subject to the existing criteria for copper, the Department of Natural Resources (DNR) estimates that 21 or 22 facilities are unable to comply. Of the 21 or 22 facilities unable to comply with the existing criteria, DNR estimates that 7 to 10 would be able to comply with the BLM- or WER-based criteria for copper proposed in this rule making. These 7 to 10 facilities could experience a significant cost savings by avoiding the need to install copper removal technology in order to comply with the existing criteria.

The accumulation of copper at the biotic ligand (i.e., the gill of a fish or other similar site for aquatic organisms) above a critical threshold concentration leads to toxicity. The amount of copper that will actually accumulate at the gill depends in large part on the water chemistry of the particular water body. The BLM accounts for several water chemistry parameters to predict the concentration of copper that would actually result in toxicity to an organism in a given water body. The United States Environmental Protection Agency (EPA) has developed a BLM-based approach for calculating water quality criteria for copper. The Commission seeks to adopt by reference the EPA document “Aquatic Life Ambient Freshwater Quality Criteria-Copper 2007 Revision (EPA-822-R-07-001), February 2007.”

The WER method allows permittees to take into account the difference between the toxicity of a metal as measured in laboratory water versus the toxicity of the metal as measured in ambient water of the discharge site. The WER method allows facilities to calculate a ratio between the two measured toxicity levels and use the ratio to adjust the existing criteria for copper shown in subrule 61.3(3), Table 1. Permittees wishing to use this option will be required to conduct a WER study approved by the DNR. WER studies must be conducted in accordance with the EPA document “Interim Guidance on Determination and Use of Water-Effect Ratios for Metals (EPA-823-B-94-001), February 22, 1994,” or upon approval by the DNR, “Streamlined Water-Effect Ratio Procedure for Discharges of Copper (EPA-822-R-01-005), March 2001,” both of which the Commission seeks to adopt by reference.

The proposed amendments will give National Pollutant Discharge Elimination System (NPDES) permit holders the ability to use the WER to adjust the existing criteria for copper, or the ability to use the BLM to generate criteria for copper that reflect the unique water chemistry characteristics of the receiving water body. The proposed amendments will create flexibility for NPDES permit holders seeking to comply with water quality standards while minimizing the need for expensive infrastructure upgrades.

Any person may submit written suggestions or comments on the proposed amendments on or before November 4, 2016. Such written material should be submitted to Connie Dou, Iowa Department of Natural Resources, Wallace State Office Building, 502 East 9th Street, Des Moines, Iowa 50319; fax (515)725-8202; or e-mail connie.dou@dnr.iowa.gov. Persons who have questions regarding the amendments may contact Connie Dou at (515)725-8400.

Persons are invited to present oral or written comments at a series of public hearings, which will be held throughout the state as follows:

Date	Time	Location
November 1, 2016	4 to 6 p.m.	Nicola-Stoufer Room Washington Public Library 115 W. Washington St. Washington, Iowa
November 2, 2016	4 to 6 p.m.	Meeting Room B Urbandale Public Library 3520 86th St. Urbandale, Iowa
November 3, 2016	4 to 6 p.m.	Council Chambers City Hall 620 Erie St. Storm Lake, Iowa

Persons attending a hearing will be asked to give their names and addresses for the record and to confine their remarks to the content of the proposed amendments. Any persons who plan to attend a public hearing and have special requirements, such as those related to hearing or mobility impairments, should contact the DNR and advise of specific needs.

After analysis and review of this rule making, these amendments are expected to have a positive impact on jobs. The amendments are projected to result in a total cost savings for cities, industries, and semipublic entities ranging between \$113 million and \$215 million. This total savings is expected to be achieved by 7 to 10 facilities across the state that may be able to avoid the installation of copper removal technology by using the copper BLM or WER. These cost savings will likely lead to further investment in production and job growth.

Additional information regarding Iowa's Water Quality Standards, including the Fiscal Impact Statement, Job Impact Statement, and links to the BLM and WER documents, can be found on the Department's Web site at <http://www.iowadnr.gov/Environmental-Protection/Water-Quality/Water-Quality-Standards>.

These amendments are intended to implement Iowa Code section 455B.173(2).

The following amendments are proposed.

ITEM 1. Amend subrule **61.3(3)**, TABLE 1, Criteria for Chemical Constituents, parameter for copper, as follows:

Copper	Chronic ⁽ⁿ⁾	20	—	16.9(i)	16.9(i)	16.9(i)	10	—	—
	Acute ⁽ⁿ⁾	30	—	26.9(i)	26.9(i)	26.9(i)	20	—	—
	Human Health + — Fish	—	—	—	—	—	—	—	1000 ^(e)
	Human Health + — F & W	—	—	—	—	—	—	—	1300 ^(f)

ITEM 2. Adopt the following **new** footnote (n) in subrule **61.3(3)**, TABLE 1, Criteria for Chemical Constituents:

- (n) The copper criteria in Table 1 can be adjusted by a Water-Effect Ratio (WER). The WER factor is equal to 1.0 unless an approved WER study has been conducted by a permittee for a specific point source. The WER study shall be conducted in accordance with the "Interim Guidance on Determination and Use of Water-Effect Ratios for Metals (EPA-823-B-94-001), February 22, 1994," or upon approval by the department, the "Streamlined Water-Effect Ratio Procedure for Discharges of Copper (EPA-822-R-01-005), March 2001," which are hereby adopted by reference.

The copper Biotic Ligand Model (BLM) may be used as an alternative to the copper criteria in Table 1. The copper BLM is found in the document “Aquatic Life Ambient Freshwater Quality Criteria - Copper 2007 Revision (EPA-822-R-07-001), February 2007,” which is hereby adopted by reference.

ITEM 3. Reserve subrule **61.3(9)**.

ITEM 4. Adopt the following **new** subrule 61.3(10):

61.3(10) *Implementation procedure for biotic ligand model-based copper criteria.* The department hereby incorporates by reference “Implementation Procedure for Biotic Ligand Model-Based Copper Criteria,” [effective date of this amendment]. This document may be obtained on the department’s Web site.