

Implementing the 2016 Selenium Criterion in Water Quality Standards: U.S. Environmental Protection Agency Draft Technical Support Document



Walter Wright, Jr.
wwright@mwlaw.com
(501) 688.8839

10/22/2021

The United States Environmental Protection Agency (“EPA”) issued a draft technical support document titled:

Technical Support for Adopting and Implementing EPA’s 2016 Selenium Criterion in Water Quality Standards (“Draft Document”)

See EPA 823-D-21-001 (October 2021).

EPA’s purpose in issuing the *Draft Document* is to assist states and authorize tribes in implementing the agency’s recommended final aquatic life and ambient water quality criteria for selenium.

Water quality criteria (“WQC”) are ambient water quality conditions that are deemed protective of the uses established for a waterbody. States are required by the Clean Water Act to adopt WQC protective of the designated uses. The WQC must specify the maximum concentration of pollutants that may be present in the water without impairing its suitability for certain uses. They generally assume three forms which include:

- Numerical terms reflecting maximum concentration of a particular pollutant in the receiving water;
- Bioassay or biomonitoring results which reflect mortality rates of certain waterborne organisms relative to the concentrations of particular pollutants; or
- Terms narrative in nature.

EPA develops WQC pursuant to Section 304 of the Clean Water Act. They are frequently used by the states in establishing or revising their water quality standards. However, states are free to adopt or develop their own WQC if there is a scientific basis for doing so. Such state-developed WQC are reviewed and approved by EPA.

The *Draft Document* notes by way of introduction that in 2016 EPA updated its National Clean Water Act Section 304(a) recommended chronic aquatic life criterion for selenium in freshwater systems. Such update was intended to reflect the latest scientific information.

The *Draft Document* provides an overview of the recommended chronic aquatic life selenium criterion and references the technical support materials.

In addressing EPA’s adoption of the recommended selenium criterion, the *Draft Document* discusses:

- The Four-Part Criterion
- Options for Site-Specific Water Column Criterion Elements
- Relationship with EPA's National Clean Water Act Section 304(a) Recommended Selenium Criterion to the Great Lakes Initiative

Options for implementing EPA's selenium criterion are discussed such as:

- Site-specific Fish Tissue Criterion Elements
- Site-specific Fish tissue Criterion Elements Using the Species Recalculation Procedure
- Site-specific Fish Tissue Criterion Elements for Sites with Naturally Elevated Selenium Levels
- Water Quality Standards Variances
- Revision to Designated Uses
- Compliance Schedule

A copy of the *Draft Document* can be downloaded [here](#).