UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8
1595 Wynkoop Street
Denver, CO 80202-1129
Phone 800-227-8917
www.epa.gov/region08

SEP 29 2014

Ref: 8EPR-EP

Dr. Andrew Todd, Chair
Water Quality Control Commission
4300 Cherry Creek Drive South
Denver, CO 80222-1530

Re: EPA Action on Revisions to Water Quality Standards

Dear Dr. Todd:

The U.S. Environmental Protection Agency (EPA) Region 8 has completed its review of certain revisions to water quality standards (WQS) adopted by Colorado's Water Quality Control Commission (Commission). The revisions addressed in today's action were adopted on March 11, 2014, with an effective date of June 30, 2014. The submission letter included an Opinion of the Attorney General certifying that the standards were duly adopted pursuant to State law. Receipt of the revised standards on March 27, 2014 initiated the EPA's review pursuant to Clean Water Act (CWA) § 303(c). The EPA has completed its review, and this letter is to notify you of our action.

The revisions included deletion of temporary modifications (5 segments), extension of temporary modifications (6 segments) and adoption of new site-specific numeric standards (4 segments). These changes were adopted as a result of the annual review of temporary modifications due to expire within approximately two years, as required by Section 31.7(3)(e) of the Basic Standards and Methodologies for Surface Waters.

CLEAN WATER ACT REVIEW REQUIREMENTS

CWA § 303(c)(2) requires States and authorized Indian Tribes to submit new and revised water quality standards to the EPA for review. The EPA is required to review and approve or disapprove the revised standards pursuant to CWA § 303(c)(3). The Region's goal has been, and will continue to be, to work closely and collaboratively with States and authorized Tribes throughout the standards revision process so that submitted revisions can be approved by the EPA.

TODAY'S ACTION

We are pleased to inform you that today the Region is approving the WQS revisions adopted March 11, 2014. The revisions and the basis for the EPA's action are summarized in the enclosure.

The water quality standards approvals in today's letter apply only to water bodies in the State of Colorado, and do not apply to waters that are within Indian country, as defined in 18 U.S.C. Section 1151. "Indian country" also includes any land held in trust by the United States for an Indian tribe and any other areas defined as "Indian country" within the meaning of 18 U.S.C. 1151. Today's letter is not intended as an action to approve or disapprove water quality standards applying to waters within Indian Country. The EPA, or authorized Indian Tribes, as appropriate, will retain responsibilities for water quality standards for waters within Indian country.

ENDANGERED SPECIES ACT REQUIREMENTS

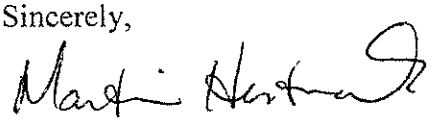
It is important to note that the EPA's approval of water quality standards is considered a federal action which may be subject to the Section 7(a)(2) consultation requirements of the Endangered Species Act (ESA). Section 7(a)(2) of the ESA states that "each federal agency...shall...insure that any action authorized, funded or carried out by such agency is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined to be critical..."

The EPA has initiated consultation under ESA Section 7(a)(2) with the U.S. Fish and Wildlife Service regarding our approval of certain new or revised water quality standards. The EPA also has a Clean Water Act obligation, as a separate matter, to complete its water quality standards approval action. Therefore, in approving these water quality standards revisions today, the EPA is completing its CWA § 303(c) responsibilities. However, because ESA consultation is ongoing, the EPA's approval is made subject to the outcome of the ESA consultation process. Should the consultation process with the U.S. Fish and Wildlife Service identify information regarding impacts on listed species or designated critical habitat that supports amending the EPA's approval, the EPA will, as appropriate, revisit and amend its approval decision for those new or revised water quality standards.

CONCLUSION

The Region commends both the Commission and the Water Quality Control Division for their efforts to consider site-specific data and circumstances as a basis for reviewing and revising water quality standards for Colorado waters. We are pleased to be approving the WQS revisions addressed by today's action letter. If you have any questions concerning this letter, the most knowledgeable person on my staff is David Moon and he can be reached at 303-312-6833.

Sincerely,



Martin Hestmark
Assistant Regional Administrator
Office of Ecosystems Protection
and Remediation

Enclosure

REVISIONS TO WATER QUALITY STANDARDS
ADOPTED MARCH 11, 2014

This enclosure presents a summary of the water quality standards revisions adopted by the Water Quality Control Commission (Commission) on March 11, 2014 and the rationale for the EPA's action. The following regulations were amended:

- Classifications and Numeric Standards for Upper Colorado River Basin and North Platte River (Regulation #33)
- Classifications and Numeric Standards for San Juan River and Dolores River Basins (Regulation #34)
- Classifications and Numeric Standards for Rio Grande River Basin (Regulation #36)
- Classifications and Numeric Standards for Lower Colorado River Basin (Regulation #37)
- Classifications and Numeric Standards for South Platte River Basin, Laramie River Basin, Republican River Basin, Smoky Hill River Basin (Regulation #38)

DELETION/EXTENSION OF TEMPORARY MODIFICATIONS

The revisions to water quality standards are summarized in Table 1. Based on the evidence presented during the rulemaking process, the EPA concludes that the revisions to delete or extend temporary modifications are consistent with the general policy in *The Basic Standards and Methodologies for Surface Waters* (Regulation #31, Section 31.7(3)).[1] The EPA's regulation at 40 CFR § 131.13 provides that such general policies may be adopted at State discretion, while also specifying that they are subject to the EPA's review and approval. The Colorado general policy has been approved by the EPA on multiple occasions, and most recently on August 4, 2011. Because they are consistent with the evidence presented to the Commission and Colorado's general policy, the revisions that delete or extend temporary modifications are approved, subject to ESA consultation.

Table 1: Summary of WQS Revisions Adopted March 11, 2014

Reg	Segment No.	Description
33	Eagle River 8	Temperature temporary modification deleted
	Eagle River 9a	Temperature temporary medication deleted
34	Animas and Florida 13b	Total ammonia temporary modification extended from 6/30/2014 to 6/30/2015
	La Plata segment 7a	Total ammonia temporary modification extended from 6/30/2014 to 6/30/2015
	La Plata segment 8c	Total ammonia temporary modification extended from 6/30/2014 to 6/30/2015

[1] Section 31.7(3) authorizes temporary modifications if an existing permitted discharge has a demonstrated or predicted water quality-based effluent limit compliance problem, and one of two situations is shown to exist: (1) significant uncertainty regarding the water quality standard necessary to protect current and/or future uses, or (2) significant uncertainty regarding the extent to which existing quality is the result of natural or irreversible human induced conditions. Section 31.7(3) requires that adequate supporting information must be submitted, including a justification for the interim narrative or numeric value, any data describing effluent and ambient quality, a plan for eliminating the need for the temporary modification, and a justification for the proposed expiration date. Temporary modification expiration dates are determined by the Commission based on relevant factors, including how soon resolving the issues that necessitated adoption of the temporary modification is deemed feasible. Pursuant to 31.7(3)(e), the Commission must hold an annual rulemaking hearing to review temporary modifications that will expire within approximately two years. Pursuant to such hearings, the Commission may delete, modify, or make no changes to each temporary modification. Compliance schedules requiring actions intended to eliminate the uncertainty regarding the appropriate underlying standard may be included in the permit pursuant to 31.14(15)(b).

Table 1: Summary of WQS Revisions Adopted March 11, 2014		
36	Rio Grande 4a	Cadmium, lead, and zinc temporary modifications extended from 6/30/2015 to 12/31/2016 Tiered feasibility-based numeric standards adopted
	Rio Grande 7	Temporary modifications for multiple parameters extended from 6/30/2015 to 12/31/2016 Tiered feasibility-based numeric standards adopted
37	Lower Colorado 13b	Temperature temporary modification deleted
38	Upper South Platte 14	Selenium temporary modification deleted
	Upper South Platte 16j	A new segment was created that includes several tributaries previously in Upper South Platte segment 16c. Ambient-based numeric standards for selenium were adopted for the new segment.
	Upper South Platte 16g	Selenium temporary modification replaced by ambient-based numeric standards for selenium
	Clear Creek 13b	Temporary modifications for iron, manganese, and zinc deleted Cadmium temporary modification extended from 7/1/2015 to 12/31/2018

SITE-SPECIFIC NUMERIC STANDARDS

Rio Grande Segments 4a and 7

Rio Grande segment 4a (main stem of the Rio Grande) and 7 (lower Willow Creek) are affected by metal loads from historic mining sources in the Willow Creek drainage. The Commission adopted feasibility-based numeric standards that are intended to represent the lowest ambient concentrations that are feasible to achieve. The standards were calculated based on an attainability analysis which concluded that metal loads can be reduced, and water quality can be improved. Primarily, load reductions can be achieved with treatment of water discharged from the Bulldog Mine, a 90% reduction in flow and metal load from the Nelson Tunnel, and a 50% reduction in metal load from the Solomon Mine. The EPA concludes that the Commission was presented with a reasonable argument that the previous numeric standards were not feasible to achieve, and that the proposed numeric standards better describe the ambient concentrations that are attainable and appropriate. The EPA emphasizes that the adopted numeric standards will need to be reviewed and revised, as necessary, as a result of the State's triennial review process (e.g., as new information becomes available).

The EPA's regulation provides States with the flexibility to refine their water quality criteria based on site-specific conditions (40 CFR § 131.11(b)) provided that such criteria protect the designated use (40 CFR § 131.11(a)). Similarly, the regulation allows States to adopt less-restrictive designated use subcategories where "human-caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied" (40 CFR § 131.10(g)(3)). Given that the attainability analysis concluded that certain aquatic life table values are not feasible to achieve, it is reasonable to ask whether changes to aquatic life designated uses should also be considered. Based on the evidence presented during the rulemaking process, the EPA concludes that the use classifications for Rio Grande segment 4a (Aquatic Life Cold 1) and 7 (Aquatic Life Cold 2) are consistent with the aquatic life uses that are attainable, and there is no reason to consider changes to use classifications. For example, Rio Grande segment 4a now supports a blue ribbon trout fishery, and thus a Cold 1 use appears to be appropriate and attainable. Likewise, although a diverse aquatic life community appears not to be attainable in Rio Grande segment 7 due to severe physical habitat and water quality constraints, those limitations on the use are already recognized by the Cold 2 use classification. Section 31.13(1)(c)(iii) of the Basic Standards regulation explains that a Class 2 use is appropriate for:

> ...waters that are not capable of sustaining a wide variety of cold or warm water biota, including sensitive species, due to physical habitat, water flows or levels, or

> uncorrectable water quality conditions that result in substantial impairment of the abundance and diversity of species.

The Commission's decision to adopt feasibility-based numeric standards is consistent with the general policy in *The Basic Standards and Methodologies for Surface Waters* (Regulation #31, Section 31.7(1)(b)(iii)). Colorado's general policy provides that:

> For state surface waters where an indicator species procedure (water effects ratio), recalculation procedure, use attainability analysis or other site-specific analysis has been completed in accordance with section 31.16(2)(b), or in accordance with comparable procedures deemed acceptable by the Commission, the Commission may adopt site-specific standards as determined to be appropriate by the site-specific study results.

Because the adopted numeric standards are consistent with the site-specific WQS flexibilities and requirements specified in the EPA's water quality standards regulation, and because such standards were developed to reflect the most protective ambient concentrations that are feasible to achieve, the revisions are approved, subject to ESA consultation. The EPA expects that the numeric standards will be reviewed and revised, as appropriate, as additional information becomes available.

Upper South Platte Segments 16g and 16j

Ambient-based standards for selenium were assigned to Upper South Platte River segment 16g (Marcy Gulch) and Upper South Platte River segment 16j (Lee Gulch, Little's Creek, Big Dry Creek, and Little Dry Creek) pursuant to Section 31.7(1)(b)(ii) of *The Basic Standards and Methodologies for Surface Waters*. Table 2. Acute (95th percentile concentrations) and chronic (85th percentile concentrations) numeric standards were adopted.

Section 31.7(1)(b)(ii) authorizes adoption of site-specific standards based on water quality conditions that are wholly the result of natural or irreversible sources of pollution. The Commission determined, based on evidence submitted by the Centennial Water and Sanitation District, the City of Littleton and the City of Englewood that selenium loading in these waters results from natural and irreversible man-induced sources and is not exacerbated by point source discharges or reversible anthropogenic factors.

Table 2: Ambient-Based Selenium Standards for Upper South Platte River Segments 16g and 16j

Segment	Stream	Acute µg/L	Chronic µg/L
16g	Marcy Gulch	21	13
16j	Lee Gulch	TVS	10
	Little's Creek	TVS	6
	Big Dry Creek	26	23
	Little Dry Creek	TVS	11

The EPA's water quality standards regulation authorizes removal of a designated use where "naturally occurring pollutant concentrations prevent the attainment of the use" (40 CFR § 131.10(g)(1)). The feasibility of remedying human-induced pollution is specifically addressed in 40 CFR § 131.10(g)(3), which authorizes removal of a designated use where "human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place." The Region approved 31.7(1)(b)(ii) of the Basic Standards regulation because in situations where natural and/or irreversible human caused conditions provide a basis for removing the designated use under 40 CFR § 131.10(g), and/or there is credible evidence that these same factors limit the attainable water quality condition, retaining the designated use while also

establishing ambient-based standards protects the highest attainable water quality condition and the highest attainable aquatic life use.

The Aquatic Life Warm 2 use classifications assigned to Upper South Platte segments 16g and 16j were not modified as a result of this rulemaking. Section 31.13(1)(c)(iii) of the Basic Standards regulation explains that a Class 2 use is appropriate for:

> ...waters that are not capable of sustaining a wide variety of cold or warm water biota, including sensitive species, due to physical habitat, water flows or levels, or uncorrectable water quality conditions that result in substantial impairment of the abundance and diversity of species.

The Region concludes that the adopted numeric standards for selenium are appropriate for protection of the assigned aquatic life use classifications (40 CFR § 131.11) and consistent with Section 31.7(1)(b)(ii) of *The Basic Standards and Methodologies for Surface Waters*. Accordingly, the revisions are approved, subject to ESA consultation. The EPA expects that the numeric standards will be reviewed and revised, as appropriate, as additional information becomes available.