



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8**

1595 Wynkoop Street
DENVER, CO 80202-1129
Phone 800-227-8917
<http://www.epa.gov/region08>

JUN 5 2014

Ref: 8EPR-EP

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

Subject: Approval of 31.7(4) (Discharger-Specific
Variances)

Dear Dr. Todd:

The U.S. Environmental Protection Agency (EPA) has completed its review of Section 31.7(4) of the Basic Standards and Methodologies for Surface Waters, which authorizes the State to adopt discharger-specific variances. The revisions were adopted by the Colorado Water Quality Control Commission (Commission) on August 9, 2010, with a delayed effective date of January 1, 2013 (later revised to October 1, 2013). 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 August 24, 2010 initiated EPA's review pursuant to Section 303(c) of the Clean Water Act (CWA or the Act) and the implementing federal water quality standards regulation (40 CFR Part 131).

CLEAN WATER ACT REVIEW REQUIREMENTS

CWA § 303(c)(2) requires States and authorized Indian Tribes to submit new or revised water quality standards to EPA for review. 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 EPA.

TODAY'S ACTION

EPA Region 8 approves new Section 31.7(4) of the Basic Standards regulation, without condition. The rationale for EPA's action is discussed in Enclosure 1. Today's letter applies only to water bodies in the State of Colorado, and does not apply to waters that are within Indian

Country, as defined in 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. EPA, or authorized Indian Tribes, as appropriate, will retain responsibilities for water quality standards for waters within Indian Country.

ENDANGERED SPECIES ACT REQUIREMENTS

Section 31.7(4) of the Basic Standards regulation is merely an authorizing (or "general") policy (40 CFR § 131.13) and thus has no effect on listed or proposed endangered or threatened species or critical habitat. As a result, for the provisions approved today, no consultation with the Fish and Wildlife Service is required.

CONCLUSION

EPA Region 8 congratulates the Commission for adopting a new WQS rule provision authorizing the adoption of discharger-specific variances. If you have any questions concerning this letter, please contact David Moon (303 312-6833).

Sincerely,



Martin Hestmark
Assistant Regional Administrator
Office of Ecosystems Protection
and Remediation

Enclosure

RATIONALE FOR EPA'S APPROVAL OF NEW SECTION 31.7(4) OF THE BASIC STANDARDS AND METHODOLOGIES FOR SURFACE WATERS

Today's EPA action letter addresses new Section 31.7(4) of the Basic Standards and Methodologies for Surface Waters, which was adopted by the Water Quality Control Commission (Commission or WQCC) on August 9, 2010. This enclosure describes the new or revised WQS provisions and provides a rationale for EPA's approval action pursuant to CWA §303(c). EPA's review was informed by new WQCC Policy 13-1 (Interim Guidance for Implementation of Discharger Specific Variance Provisions). WQCC Policy 13-1 is a guidance document upon which EPA will not act pursuant to CWA § 303.

STATE RULE LANGUAGE

New Section 31.7(4) of the Basic Standards and Methodologies for Surface Waters reads as follows:

(4) Granting, Extending and Removing Variances to Numeric Standards (effective October 1, 2013)

A variance to a water quality standard may be granted by the Water Quality Control Commission when the criteria of this subsection are met. The presence of the variance will be indicated in the appropriate water quality standards regulation. When the variance expires or is removed by the Commission, the underlying standard will be in full effect. In every case, the variance to the standard shall be temporary and must be re-examined not less than once every three years.

(a) Criteria for Granting a Discharger Specific Variance

Variances to numeric standards are authorized only where a comprehensive alternatives analysis demonstrates that there are no feasible alternatives that would allow for the regulated activity to proceed without a discharge that exceeds water quality-based effluent limits. In addition, an applicant for a variance must satisfy both of the following criteria.

(i) Tests to Determine the Need for a Variance

- (A) Limits of Technology: Demonstration that attaining the water quality standard is not feasible because, as applied to the point source discharge, pollutant removal techniques are not available or it is technologically infeasible to meet the standard;**
- (B) Economics: Demonstration that attaining the water quality standard is not feasible because meeting the standard, as applied to the point source**

discharge, will cause substantial and widespread adverse social and economic impacts in the area where the discharge is located. Considerations include such factors as the cost and affordability of pollutant removal techniques; or

- (C) Other Consequences: 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.**

(ii) Demonstration that the conditions for granting a temporary modification are not met; or, if those conditions are met, determination by the Commission, after considering the site-specific circumstances, that granting a variance under this subsection is preferable as a matter of policy.

(b) Selection of Alternative Effluent Limits.

An applicant for a variance shall submit a comprehensive alternatives analysis regarding pollutant removal techniques. Variances approved by the Commission shall be incorporated into the relevant standards tables as “alternative effluent limits.” The Commission shall select such limits based upon an evaluation of the alternatives analysis and consideration of the impact of the variance on the uses of the water body in the area of the variance and downstream of that area. Alternative effluent limits represent the highest degree of protection of the classified use that is feasible within 20 years, taking into consideration the factors in subsection (4)(a)(i)(C), as appropriate, and must maintain and protect existing uses in a manner consistent with federal requirements.

(c) Duration of a Variance

When a variance is granted, the duration of the variance will be set by the Commission. The duration of a variance shall be determined on a case-by-case basis, based upon all relevant factors, including the potential for achieving more protective effluent levels.

(d) Considerations for Extending a Variance

A variance shall not be extended if the permittee did not submit the reports required under section 31.14(17)(c) and substantially comply with all other conditions of the variance.

FEDERAL REQUIREMENTS AND GUIDANCE

EPA’s water quality standards regulation (40 C.F.R. § 131.13) provides that variance policies may be adopted at State discretion, and that such general policies are subject to review and approval by the EPA.¹ The EPA’s long-standing interpretation is that a variance may be granted as long as at least one of the factors identified in 40 C.F.R. § 131.10(g) for removing a

¹ Guidance regarding State options is provided in Section 5.3 of the EPA Water Quality Standards Handbook (EPA-823-B-94-005, August 1994). <http://water.epa.gov/scitech/swguidance/standards/handbook/index.cfm>.

designated use or adopting a use subcategory is met.² Section 131.10(g) authorizes the removal of a designated use where the demonstration can be made that attainment of the designated use is not feasible because of: (1) naturally occurring pollutant concentrations, (2) natural, ephemeral, intermittent or low flow conditions or water levels, (3) human caused conditions or sources of pollution cannot be remedied or would cause more environmental harm damage to correct than to leave in place, (4) dams, diversions, or other types of hydrologic modifications, (5) physical conditions related to natural features of the water body, or (6) substantial and widespread economic and social impact. Because Section 131.10(g) factors are satisfied only in situations where attaining the designated use is infeasible, the justification for a discharger variance must similarly demonstrate that attaining the designated use is infeasible during the term of the variance.

In 1998, EPA published a notice in the Federal Register that included a number of guidelines regarding discharger-specific variances.³ A discharger specific variance:

- should be granted only where there is a demonstration that one of the use removal factors (40 CFR 131.10(g)) has been satisfied;
- is granted for a specific pollutant(s) and does not otherwise modify the standards;
- identifies and justifies the numerical criteria that will apply during the existence of the variance;
- is established as close to the underlying numerical criteria as is possible;
- is reviewed every three years, at a minimum, and extended only where the conditions for granting the variance still apply;
- does not exempt the discharger from compliance with applicable technology or other water quality-based limits; and
- does not affect effluent limitations for other dischargers.

In 2013, EPA proposed revisions to the federal WQS regulation, including the addition of new requirements pertaining to water quality standards variances (the comment period closed on January 2, 2014). The proposed rule and preamble provide detailed information regarding EPA's existing variance policy and approach.⁴

² "Variances in Water Quality Standards." March 15, 1985. Memorandum to the EPA Regional Water Division Directors from Edwin L. Johnson, Director, Office of Water Regulations and Standards. http://water.epa.gov/scitech/swguidance/standards/upload/2008_08_04_standards_wqsvariance.pdf.

³ Advance Notice of Proposed Rulemaking. WQS Regulation. 63 Federal Register 36741-36806. July 7, 1998.

⁴ Water Quality Standards Regulatory Clarifications, Proposed Rule. September 4, 2013. 78 Federal Register 54531-54546.

EPA’S REVIEW OF 31.7(4)

Eligibility Criteria

Colorado’s new policy describes the situations where adoption of variances is authorized (i.e., “eligibility criteria”). For example, 31.7(4)(a) specifies that variances are authorized only when a comprehensive alternatives analysis has been completed. The Statement of Basis and Purpose explains that the alternatives analysis is to include non-discharge options (e.g., pollutant reduction or elimination, seasonal retention, land application). While EPA’s regulations do not explicitly require an alternative analysis for removing designated uses, EPA’s view is that in many cases such an analysis is appropriate in order to effectively and persuasively demonstrate that the water quality standard is not feasible to achieve.

In addition to requiring an alternatives analysis, 31.7(4) identifies three situations (eligibility criteria) where adoption of variances may be authorized. This is in contrast to the federal rule (40 CFR 131.10(g)), which authorizes removal of designated uses in six situations. The three eligibility criteria included in the Colorado policy are as follows: (1) attaining the standard is not feasible because “pollutant removal techniques are not available” or meeting the standard is “technologically infeasible,” (2) attaining the standard would cause “substantial and widespread adverse social and economic impacts” based on the cost and affordability of pollutant removal techniques, and (3) 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 second and third criteria closely follow use removal factors identified in Section 131.10(g) of the EPA rule. That is, 31.7(4)(a)(i)(B) is consistent with 40 CFR 131.10(g)(6), and 31.7(4)(a)(i)(C) is consistent with 40 CFR 131.10(g)(3). Although the first criterion (31.7(4)(a)(i)(A)) uses terminology that is not taken verbatim from Section 131.10(g) (e.g., “limits of technology”), EPA recognizes there may be situations where it is not possible to discontinue the discharge or pursue a non-discharge alternative, and treatment technologies do not exist that allow for consistent attainment of water quality-based effluent limits. Accordingly, information regarding treatment technologies may be relevant to demonstrating that one of the 40 CFR 131.10(g) factors are met. WQCC Policy 13-1 (p. 13) explains that:

A pollution control alternative is not *technologically feasible* when it cannot reliably treat to the levels that are required to meet the WQBEL...The applicant may request a DSV if there are no feasible alternatives within its control to attain water quality standards...and if the best available technology cannot reliably meet the WQBEL. In this case, the DSV applicant would develop an alternative effluent limit...that is based upon the best water quality that can be achieved, taking into account a compliance safety factor.

EPA is approving this language as a general policy, but notes that individual DSVs would be subject to EPA review and approval or disapproval consistent with EPA’s regulations at 40 CFR Part 131.

Water Quality Protections that Apply While the Variance is in Effect

EPA’s review of 31.7(4) also considered the level of water quality protection to be provided while variances are in effect. EPA’s position is that variances will need to reflect the highest attainable condition, as discussed in the 1998 Advanced Notice of Proposed Rulemaking (ANPRM), the 2012 multiple discharger variance (MDV) guidance, and the 2013 proposed revisions to EPA’s water quality standards regulation.^{5,6,7}

31.7(4)(b) provides that variances are to include “alternative effluent limits” (AELs) and specifies that such limits are to “represent the highest degree of protection of the classified use that is feasible ...” WQCC Policy 13-1 explains that the AELs “must characterize the expected effluent quality with full implementation of the selected alternative.” 31.7(4) also specifies that variances “shall be temporary and must be re-examined not less than once every three years.”

EPA concludes that the water quality protections required by the Colorado general policy are consistent with CWA requirements because the policy will require the highest degree of protection that is feasible, and that such requirements are to be re-examined not less than once every three years.

Existing Use Protection

Many Colorado surface waters have excellent water quality, such that all designated uses (use classifications) are fully attained. Thus, it is important to consider that the authority to grant variances for new and existing discharges is constrained by the federal requirement to protect existing uses. For example, pursuant to 40 CFR § 131.10(h), WQS variances may be adopted only in situations where the designated use is not an existing use, as defined in § 131.3.⁸ In similar fashion, Section 31.7(4)(b) specifies that alternative effluent limits specified in a DSV “must maintain and protect existing uses in a manner consistent with federal requirements.”

⁵ In the 1998 ANPRM, EPA stated that “a variance is established as close to the underlying numerical criteria as is possible.” 63 Federal Register 36741-36806. July 7, 1998.

⁶ In the 2012 MDV guidance, EPA explained that “the highest attainable condition is the condition that is both feasible to attain and is closest to the protection afforded by the designated use and criteria. *Discharger-specific Variances on a Broader Scale: Developing Credible Rationales for Variances that Apply to Multiple Dischargers. Frequently Asked Questions.* EPA, March 2013. EPA-820-F-13-012.

⁷ The 2013 preamble explains that “a variance is a time-limited designated use and criterion that is targeted to a specific pollutant(s), source(s), and/or water body or waterbody segment(s) that reflects the highest attainable condition during the specified time period.” 78 Federal Register 54531(Sept. 4, 2013).

⁸ 40 CFR § 131.3(e) provides that “existing uses are those uses actually attained in the water body on or after November 28, 1975, whether or not they are included in the water quality standards.”

WQCC Policy 13-1 (App A – 12) explains that:

Under the CWA and 40 CFR Section 131.10(g), variances must protect existing uses. Thus, it may not be appropriate to grant variances where a proposed new discharge would create a new WQS impairment, or where a proposed new discharge would exacerbate an existing impairment (e.g., increase the magnitude, duration, and frequency of use impairment). In either case, granting a variance to a new discharge may fail to maintain and protect the existing use. In these situations, options such as non-discharge alternatives, alternative discharge locations, site-specific WQS, TMDLs, or trading may be appropriate to consider.

Variances, NPDES Permits, and CWA § 303(d)

For the period of time when a variance is in effect, CWA National Pollutant Discharge Elimination System (NPDES) permits for discharges included in the variance must include limits (i.e., the “alternative effluent limits”) specified by the variance. This approach is consistent with 40 CFR §122.44(d) which requires WQBELs that “derive from and comply with” water quality standards. Development of WQBELs based on the underlying WQS (effective upon expiration of the variance) would be appropriate if the variance is scheduled to expire during the term of the permit.

However, regarding impairment decisions and total maximum daily loads (TMDLs), CWA § 303(d)(1)(A) requires that each State shall identify “those waters within its boundaries for which the effluent limitations required by section 301(b)(1)(A) and section 301(b)(1)(b) are not stringent enough to implement any water quality standard applicable to such waters” (emphasis added). Accordingly, listing decisions must assess the underlying designated use and criteria.⁹

CONCLUSION

Discharger-specific variances pursuant to 31.7(4) can only be established with a rulemaking to revise the appropriate basin-specific WQS rule (Regulations 32 – 38). Any such discharger-specific (segment specific) WQS revisions are subject to EPA review and approval. EPA’s review would be based on the applicable CWA requirements including 40 CFR § 131.10(g). As also specified in 31.7(4), EPA-approved variances are subject to the triennial review requirement at 40 CFR § 131.20.

⁹ The preamble to the proposed revisions to the WQS regulation explains that “...variances are time-limited and intended as a tool to facilitate water quality improvements, not to revise the long term goals for a water body. Therefore, any implementation of CWA section 303(d) must continue to be based on the underlying designated uses and criteria for the water body rather than the interim requirements.” 78 Federal Register 54533 (Sept. 4, 2013).

EPA concludes that new Section 31.7(4) of the Basic Standards and Methodologies for Surface Waters is consistent with the CWA and EPA's implementing WQS regulation. Accordingly, the revisions are approved, without condition.