

Summary of EPA Partial Approval Letter Dated January 25, 2022

EPA Actions

Arizona (ADEQ) submitted changes to WQS at Arizona Administrative Code Title 18, Chapter 11: ²101. Definitions, 107.01. Antidegradation Criteria, 114. Mixing Zones, 122. Variances. This document explains EPA's basis for approval of changes to these portions of ADEQ's 2019 Triennial Review.

EPA also acknowledges non-substantive changes in R18-11- 115 Site-Specific Standards and Appendix A Numeric Water Quality Standards. These non-substantive revisions are included to ensure public transparency but do not constitute new or revised WQS subject to EPA action under CWA 303(c).

I. R18-11-101: Definitions

ADEQ added a definition for "variance" as follows:

"Variance" means a time-limited designated use and criterion for a specific pollutant(s) or water quality parameter(s) that reflect the highest attainable condition during the term of the variance.

EPA approves pursuant to Section 303(c) of the Act.

II. R18-11-107.01: Antidegradation Criteria

Tier 3 Antidegradation Protection and Antidegradation Review

In subsection (C)(4), ADEQ revised requirements relating to Tier 3 antidegradation protection.

4. A discharge regulated under a § 404 permit that may affect existing water quality of an OAW requires a determination by the Director to ensure that existing water quality is maintained and protected and any water quality impacts are temporary. Temporary water quality impacts are those impacts that occur for a period of six months or less and are not regularly occurring. The form of such a determination shall be as follows:

- a. For Corps-issued § 404 permits, an individual § 401 water quality certification.*
- b. For Director-issued § 404 permits, a § 404 permit action, wherein the Director shall conduct a water quality evaluation as a part of the state's requirements for issuing § 404 permits and in accordance with this section.*

In subsection (D), ADEQ updated requirements relating to antidegradation reviews of § 404 permits. The modifications clarify how the form of the antidegradation review differs between a Corps-issued § 404 permit and a Director-issued § 404 permit.

D. Antidegradation review of a § 404 permit. shall be conducted as follows:

- 1. For a Corps-issued § 404 permit. The Director shall conduct the antidegradation review of any discharge authorized under a nationwide or regional § 404 permit as part of the § 401 water quality certification prior to*

issuance of the nationwide or regional permit. The Director shall conduct the antidegradation review of an individual § 404 permit if the discharge may degrade existing water quality in an OAW or a water listed on the 303(d) List of impaired waters. For regulated discharges that may degrade water quality in an OAW or a water that is on the 303(d) List of impaired waters, the Director shall conduct the antidegradation review as part of the § 401 water quality certification process.

2. For a Director-issued § 404 permit. The Director shall conduct the antidegradation review of any discharge authorized under a general § 404 permit as a part of its determination whether to issue a general permit in accordance with state requirements for issuing a § 404 general permit and with this section. The Director shall conduct the antidegradation review of an individual § 404 permit as part of the § 404 permit action in accordance with state requirements for issuing a § 404 permit and in accordance with this section.

This provision clarifies determinations of temporary water quality impacts and creates parallel tracks for Corps-issued and Director-issued § 404 permits. EPA notes that ADEQ does not have authority to issue permits under CWA § 404 and therefore the clauses related to Director-issued § 404 permits are not applicable. These provisions will only apply if and when ADEQ is approved to issue § 404 permits pursuant to CWA § 404(g).

EPA approves pursuant to Section 303(c) of the Act.

III. R18-11-114: Mixing Zones

ADEQ revised its mixing zones rule as follows:

A. The Director may establish a mixing zone for a point source discharge to a surface water as a condition of an individual AZPDES permit on a pollutant by-pollutant basis. A mixing zone is prohibited in an ephemeral water or where there is no water for dilution, or as prohibited pursuant to subsection (H) of this section.

B. The owner or operator of a point source seeking the establishment of a mixing zone shall submit a request to the Director for a mixing zone as part of an application for an AZPDES permit. The request shall include:

3. A definition of the boundary of the proposed mixing zone. For purposes of this subsection, the boundary of a mixing zone means the location is where the concentration of wastewater across a transect of the surface water differs by less than five percent complete mixing occurs; and

4. A complete and detailed description of the existing physical, biological, and chemical conditions of the receiving water and the predicted impact of the proposed mixing zone on those conditions. The description shall also address the factors listed in subsection (D) of this section that the Director must consider when deciding to grant or deny a request and shall address the mixing zone requirements in subsection (H) of this section.

~~*C. The Director shall review the request for a mixing zone to determine whether the written request is complete. If the request is incomplete, the Director shall provide the applicant with a list of the additional information required.*~~

~~*DC. The Director shall consider the following factors when deciding whether to grant or deny a request for a mixing zone:*~~

ED. Director determination.

1. The Director shall deny a request to establish a mixing zone if a water quality standard will be violated outside the boundaries of the proposed mixing zone.

HG. Mixing Zone Requirements.

1. A mixing zone shall be as small as practicable in that it shall not extend beyond the point in the waterbody at which complete mixing occurs under the critical flow conditions of the discharge and of the receiving water.

~~*4. A mixing zone shall provide for a zone of passage of not less than 50 percent of the cross-sectional area of a river or stream.*~~

~~*6.5. The size of the zone of initial dilution in a mixing zone shall prevent lethality to organisms passing through the zone of initial dilution. The mixing zone shall prevent acute toxicity and lethality to organisms passing through the mixing zone.*~~

EPA approves pursuant to Section 303(c) of the Act.

IV. R18-11-122: Variances

ADEQ deleted its previous variance rules language in its entirety and added a completely revised variance rule to align with EPA's 2015 Revision, which provides a comprehensive regulatory structure for and explicitly authorizes variances. ADEQ's revisions include defining variances as a water quality standard, enabling variances to be discharger-specific or water body or waterbody segment specific, revising time limitations and requirements for periodic review, and adding required documentation to approve a variance.

A. Upon request, the Director may establish, by rule, a discharger-specific or water segment(s)-specific variance from a water quality standard if requirements pursuant to this section are met.

B. A person who requests a variance must demonstrate all of the following information:

1. Identification of the specific pollutant and water quality standard for which a variance is sought.

2. Identification of the receiving surface water segment or segments to which the variance would apply.

3. A detailed discussion of the need for the variance, including the reasons why compliance with the water quality standard cannot be achieved over the term of the proposed variance, and any other useful information or analysis to evaluate attainability.

4. A detailed discussion of the discharge control technologies that are available for achieving compliance with the water quality standard for which a variance is sought.

5. Documentation that more advanced treatment technology than applicable technology-based effluent limitations is necessary to achieve compliance with the water quality standard for which a variance is sought.

6. *A detailed description of proposed interim discharge limitations and pollutant control activities that represent the highest level of treatment achievable by a point source discharger or dischargers during the term of the variance.*
7. *Documentation that the proposed term is only as long as necessary to achieve the highest attainable condition.*
8. *Documentation that is appropriate to the type of use to which the variance would apply as follows:*
 - a. *For a water quality standard variance to a use specified in Clean Water Act § 101(a)(2), documentation must include demonstration of at least one of the following factors that preclude attainment of the use during the term of the variance:*
 - i. *Naturally occurring pollutant concentrations prevent attainment of the use;*
 - ii. *Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use, unless these conditions may be compensated for by the discharge of sufficient volume of effluent discharges without violating state water conservation requirements to enable uses to be met;*
 - iii. *That human-caused conditions or sources of pollution prevent the attainment of the water quality standard for which the variance is sought and either (1) it is not possible to remedy the conditions or sources of pollution or (2) remedying the human-caused conditions would cause more environmental damage to correct than to leave in place;*
 - iv. *Dams, diversions or other types of hydrologic modifications preclude the attainment of the use, and it is not feasible to restore the water body to its original condition or to operate such modification in a way that would result in the attainment of the use;*
 - v. *Physical conditions related to the natural features of the water body, such as the lack of a proper substrate, cover, flow, depth, pools, riffles, and the like, unrelated to water quality, preclude attainment of aquatic life protection uses;*
 - vi. *That installation and operation of each of the available discharge technologies more advanced than those required to comply with technology-based effluent limitations to achieve compliance with the water quality standard would result in substantial and widespread economic and social impact; or*
 - vii. *Actions necessary to facilitate lake, wetland, or stream restoration through dam removal or other significant reconfiguration activities preclude attainment of the designated use and criterion while the actions are being implemented.*
 - b. *For a water quality standard variance to a use other than those uses specified in Clean Water Act § 101(a)(2), documentation must justify how consideration and value of the water subject to the use appropriately supports the variance and term. A demonstration consistent with (B)(8)(a) of this section may be used to satisfy this requirement.*
9. *For a waterbody segment(s)-specific variance, the following information is required before the Director may issue a variance, in addition to all other required documentation pursuant to this section:*

a. Identification and documentation of any cost-effective and reasonable best management practices for nonpoint source controls related to the pollutant(s) or water quality parameter(s) and water body or waterbody segment(s) specified in the variance that could be implemented to make progress towards attaining the underlying designated use and criterion; and

b. If any variance pursuant to (B)(9)(a) of this section previously applied to the water body or waterbody segment(s), documentation must also demonstrate whether and to what extent best management practices for nonpoint source controls were implemented to address the pollutant(s) or water quality parameter(s) subject to the water quality variance and the water quality progress achieved.

10. For a discharger-specific variance, the following information is required before the Director may issue a variance, in addition to all other required documentation pursuant to this section:

a. Identification of the permittee subject to the variance;

b. For an existing point source discharge, a detailed description of the existing discharge control technologies that are used to achieve compliance with applicable water quality standards. For a new point source discharge, a detailed description of the proposed discharge control technologies that will be used to achieve compliance with applicable water quality standards; and

c. Documentation that the existing or proposed discharge control technologies will comply with applicable technology-based effluent limitations.

C. The Director shall consider the following factors when deciding whether to grant or deny a variance request:

1. Bioaccumulation,

2. The predicted exposure of biota and the likelihood that resident biota will be adversely affected,

3. The known or predicted safe exposure levels for the pollutant for which the variance is requested, and

4. The likelihood of adverse human health effects.

D. The variance shall represent the highest attainable condition of the water body or water body segment applicable throughout the term of the variance.

E. A variance shall not result in any lowering of the currently attained ambient water quality, unless the variance is necessary for restoration activities, consistent with (B)(8)(a)(vii) of this section. The Director must specify the highest attainable condition of the water body or waterbody segment as a quantifiable expression of one of the following:

1. The highest attainable interim criterion,

2. The interim effluent condition that reflects the greatest pollutant reduction achievable; or

3. If no additional feasible pollutant control technology can be identified, the interim criterion or interim effluent condition that reflects the greatest pollutant reduction achievable with the pollutant control technologies installed at the time of the issuance of the variance, and the adoption and implementation of a Pollutant Minimization Program.

F. A variance shall not modify the underlying designated use and criterion. A variance is only a time limited exception to the underlying standard. For discharge-specific variances, other point source dischargers to the surface water that are not granted a variance shall still meet all applicable water quality standards.

G. Point source discharges shall meet all other applicable water quality standards for which a variance is not granted.

H. The Director may not grant a variance for a point source discharge to an OAW listed in R18-11-112(G).

I. Each variance established by the Director is subject to review and approval by the Regional Administrator.

J. The term of the water quality variance may only be as long as necessary to achieve the highest attainable condition and must be consistent with the supporting documentation in subsection (E) of this section. The variance term runs from the approval of the variance by the Regional Administrator.

K. The Director shall reevaluate, in its triennial review, whether each variance continues to represent the highest attainable condition. Comment on the variance shall be considered regarding whether the variance continues to represent the highest attainable condition. If the Director determines that the requirements of the variance do not represent the highest attainable condition, then the Director shall modify or repeal the variance in its triennial review rulemaking.

L. If the variance is modified by rulemaking, the requirements of the variance shall represent the highest attainable condition at the time of initial adoption of the variance, or the highest attainable condition identified during the current reevaluation, whichever is more stringent.

M. Upon expiration of a variance, point source dischargers shall comply with the water quality standard.

N. The following are discharger-specific variances adopted by the Director: 1.[Reserved]

O. The following are water body and waterbody segment-specific variances adopted by the Director: 1. [Reserved]

EPA approves pursuant to Section 303(c) of the Act.

EPA Acknowledgement of Non-Substantive Changes

EPA acknowledges the following non-substantive changes to previously approved WQS. EPA's acknowledgment of the non-substantive changes does not constitute an action under CWA Section 303 (c).

I. R18-11-115: Site-Specific Standards

In subsection (B)(5), ADEQ deleted the "natural adaptive" language in its site-specific standards rule that was disapproved by EPA in its action on ADEQ's 2016 Triennial Review. EPA finds this to be a non-substantive change that adds clarity but is not a WQS action under Section 303(c) of the Act.

~~5. Natural adaptive processes have enabled a viable, balanced population of aquatic life to exist in a surface water where the level of a pollutant is greater than the numeric water quality standard to protect aquatic life prescribed in Appendix A; or~~

II. Appendix C: Site-Specific Standards

ADEQ removed site-specific standards for copper for Bright Angel Wash and Transept Canyon. These site-specific standards were adopted in the 2016 ADEQ Triennial Review but were disapproved by EPA. These standards were removed to be consistent with EPA's 2016 decision. EPA finds this to be a non-substantive change that adds clarity but is not a WQS action under Section 303(c) of the Act.

Modifications to Site Specific Standards [Appendix C]

In 2016, ADEQ issued site specific standards for copper for Bright Angel Wash and Transept Canyon. EPA disapproved these site specific standards in 2016. Therefore, ADEQ is repealing the standards in this rulemaking.