

DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Water Quality Control Commission

REGULATION NO. 38 - CLASSIFICATIONS AND NUMERIC STANDARDS FOR SOUTH PLATTE RIVER BASIN, LARAMIE RIVER BASIN, REPUBLICAN RIVER BASIN, SMOKY HILL RIVER BASIN

5 CCR 1002-38

[Editor's Notes follow the text of the rules at the end of this CCR Document.]

38.6 TABLES

(2) Abbreviations:

- (c) Temporary Modification for Water + Fish Chronic Arsenic Standard
 - (i) The temporary modification for chronic arsenic standards applied to segments with an arsenic standard of 0.02 µg/l that has been set to protect the Water+Fish qualifier is listed in the temporary modification and qualifiers column as As(ch)=hybrid.
 - (ii) For discharges existing on or before 6/1/2013, the temporary modification is: As(ch)=current condition, expiring on 12/31/~~2021~~2024. Where a permit for an existing discharge is reissued or modified while the temporary modification is in effect, the division will include additional permit Terms and Conditions, which may include requirements for additional monitoring, source identification, and characterization of source control and treatment options for reducing arsenic concentrations in effluent.
 - (iii) For new or increased discharges commencing on or after 6/1/2013, the temporary modification is: As(ch)=0.02-3.0 µg/l (Trec), expiring on 12/31/~~2021~~2024.
 - (a) The first number in the range is the health-based water quality standard previously adopted by the Commission for the segment.
 - (b) The second number in the range is a technology based value established by the Commission for the purpose of this temporary modification.
 - (c) Control requirements, such as discharge permit effluent limitations, shall be established using the first number in the range as the ambient water quality target, provided that no effluent limitation shall require an “end-of-pipe” discharge level more restrictive than the second number in the range.

38.99 STATEMENT OF BASIS, SPECIFIC STATUTORY AUTHORITY AND PURPOSE; DECEMBER 9, 2019 RULEMAKING; FINAL ACTION JANUARY 13, 2020; EFFECTIVE DATE JUNE 30, 2020

The provisions of C.R.S. 25-8-202(1)(a), (b) and (2); 25-8-203; 25-8-204; and 25-8-402; provide the specific statutory authority for adoption of these regulatory amendments. The commission also adopted in compliance with 24-4-103(4) C.R.S. the following statement of basis and purpose.

BASIS AND PURPOSE

Pursuant to the requirements in the Basic Standards (at 31.7(3)), the commission reviewed the status of temporary modifications scheduled to expire before December 31, 2021 to determine whether the temporary modifications should be modified, eliminated, or extended.

For the temporary modifications set to expire after the effective date of this hearing, the commission reviewed progress toward resolving the uncertainty in the underlying standard and/or the extent to which conditions are a result of natural or anthropogenic conditions, and evaluated whether the temporary modifications were still necessary.

A. Temporary Modifications for Standards Other than Arsenic

The commission took no action on the following temporary modifications:

Upper South Platte Segment 15 (COSPUS15): temporary modifications of the chronic chloride, chronic sulfate, and acute and chronic temperature standards (expire 12/31/2020). Public Service Company of Colorado continues to make progress to resolve the uncertainty in the chloride and sulfate standards. Metro Wastewater Reclamation District continues to make progress to resolve the uncertainty in the temperature standard and is working to develop a proposal for a discharger specific variance in the June 2020 rulemaking hearing. The commission made no change to the expiration dates, as the original time allotment was deemed adequate to resolve the uncertainty.

Upper South Platte Segment 16g (COSPUS16g): temporary modification of the acute and chronic temperature standards, 12/1 to 2/29 (expires 12/31/2020). Centennial continues to make progress to resolve the uncertainty in the temperature standard. The commission made no change to the expiration date, as the original time allotment was deemed adequate to resolve the uncertainty.

Clear Creek Segment 13b (COSPCL13b): temporary modification of the acute and chronic temperature standards (expires 12/30/2020). City of Black Hawk / Black Hawk Central City Sanitation District continues to make progress to resolve the uncertainty and to investigate what level of temperature reduction is technologically feasible to achieve. The commission made no change to the expiration date, as the original time allotment was deemed adequate to resolve the uncertainty.

St. Vrain segments 6 and 7 (COSPSV06 and COSPSV07): temporary modifications of the chronic iron and acute and chronic manganese standards (expire 12/31/2020). Raytheon Boulder continues to make progress to resolve the uncertainty and is working to develop a proposal for site-specific standards in the June 2020 rulemaking hearing. The commission made no change to the expiration date, as the original time allotment was deemed adequate to resolve the uncertainty.

Big Thompson River Segment 9 (COSPBT09): temporary modification of the chronic selenium standard (expires 12/31/2020). The Town of Milliken continues to make progress to resolve the

uncertainty. The commission made no change to the expiration date, as the original time allotment was deemed adequate to resolve the uncertainty.

The commission modified the temporary modifications on the following segment:

Upper South Platte Segment 10a (COSPUS10a): temporary modification of the acute and chronic temperature standards, 12/1 to 2/29 (expires 12/31/2020). Plum Creek Water Reclamation Authority continues to make progress to resolve the uncertainty. The commission retained the Maximum Weekly Average Temperature temporary modification, but deleted the Daily Maximum (DM) temporary modification because instream temperature data show that the underlying Warm Stream Tier I (WS-I) DM temperature standard is being attained. The commission made no change to the expiration date, as the original time allotment was deemed adequate to resolve the uncertainty.

The commission deleted the temporary modifications on the following segments:

Upper South Platte Segment 14 (COSPUS14): temporary modification of the chronic chloride standard (expires 12/31/2020). The commission deleted this temporary modification because instream chloride data show that the underlying chloride standard is being attained.

Upper South Platte Segment 14 (COSPUS14): temporary modification of the acute and chronic temperature standards, 12/1 to 2/13 (expire 12/31/2020). The commission deleted this temporary modification because instream temperature data show that the underlying WS-I temperature standards are being attained.

Bear Creek Segment 1c (COSPBE01c): temporary modifications of the chronic chlorophyll a and phosphorus standards (12/31/2020). The commission deleted these temporary modifications because progress was not being made on the plan to resolve uncertainty and there are no existing permitted dischargers with demonstrated or predicted compliance problems for these parameters.

Boulder Creek Segment 9 (COSPBO09): temporary modification of the acute and chronic temperature standards, 12/1 to 2/29 (expires 12/31/2020). The commission deleted this temporary modification because instream temperature data show that the underlying Warm Stream Tier II (WS-II) temperature standards are being attained.

Cache la Poudre River Segment 11 (COSPCP11): temporary modification of the acute and chronic temperature standards, 12/1 to 2/29 (expires 12/31/2020). The commission deleted this temporary modification because instream temperature data show that the underlying WS-I temperature standards are being attained.

Cache la Poudre River Segment 12 (COSPCP12): temporary modification of the acute and chronic temperature standards (expires 12/31/2020). The commission deleted this temporary modification because instream temperature data show that the underlying WS-I temperature standards are being attained.

The commission took no action on temporary modifications that were set to expire on or before the effective date of this hearing. The commission deleted the following temporary modifications, which were allowed to expire:

Clear Creek Segment 2a (acute and chronic zinc)
Clear Creek Segment 2c (chronic copper and chronic cadmium)

B. Temporary Modifications for Arsenic

The temporary modification of the chronic arsenic standard, which applies to numerous segments with a standard of 0.02 µg/l to protect the Water + Fish use, was extended from 12/31/2021 to 12/31/2024. No changes were made to the temporary modification operative values at 38.6(2)(c). For discharges existing on or before 6/1/2013, the temporary modification remains at As(ch)=current condition and numeric effluent limits will be developed by the division using the division's implementation method (WQCD Exhibit L). For new or increased discharges that commence on or after 6/1/2013, the temporary modification remains at 0.02–3.0 µg/L (total recoverable). The extension provides time to resolve the uncertainty in the underlying standard for arsenic to protect human health. Significant uncertainty remains regarding the appropriate standard to protect the use and the extent to which ambient levels of arsenic are the result of natural or irreversible conditions. In addition, there is widespread instream non-attainment of the underlying standard and predicted or demonstrated compliance problems with permit limits based on the underlying standard, as demonstrated in the division's Prehearing Statement.

It is anticipated that the uncertainty regarding the appropriate underlying standard for arsenic to protect human health will be resolved by June 2024, with the adoption of new statewide arsenic use-based standards. The division presented (WQCD Exhibit E) a detailed plan to resolve the multifaceted uncertainty for arsenic. The plan includes conducting a field study to investigate the proportion of inorganic (versus total) arsenic in the tissue of fish collected from Colorado waters, deriving a bioaccumulation or bioconcentration factor for arsenic, appropriate for use in Colorado, and characterizing ambient levels of arsenic in surface waters and groundwater statewide. As discussed below, the division will also be gathering, through permit requirements, targeted data from facilities benefiting from the arsenic temporary modification (WQCD Exhibit D). These data will help the division to better understand the contribution of arsenic in effluent from permitted facilities to ambient levels of arsenic in Colorado waters and will inform the extent to which ambient levels of arsenic are the result of natural or irreversible conditions.

Effluent arsenic concentration data from facilities throughout the state demonstrate that many facilities will likely have issues meeting effluent limits based on the anticipated revised arsenic water quality standard to protect human health. As a result, there is a widespread need to make progress to understand sources of arsenic and options for source control and treatment. To ensure such progress is made, when implementing the "current condition" temporary modification in permits, the division will include additional permit Terms and Conditions, which may include requirements for additional monitoring, source identification, and characterization of source control and treatment options for reducing arsenic concentrations in effluent (WQCD Exhibit D). Under the duration of the temporary modification, facilities would not be required to implement facility improvements to meet a specified effluent limit; however, facilities may be required to evaluate arsenic source control and treatment options for their facility. For purposes of evaluating options to reduce arsenic concentrations in effluent, the arsenic treatment removal recognized in the 2013 Arsenic Rulemaking (3 µg/L) can be used as a point of reference until the uncertainty in the underlying standard is resolved. Implementation guidance for these requirements was included in WQCD Exhibit D. These requirements are reasonable and would not cause undue economic burden for facilities, but will ensure that progress is being made toward future attainment of the underlying standards and protection of the classified uses. Implementation of these requirements would function to increase the amount of time facilities would have for long-term planning and encourage data collection that would facilitate implementation of the most appropriate source reduction and treatment options and selection of the most appropriate regulatory pathways once the new underlying standard is adopted for arsenic.

C. Implementation of Current Condition Temporary Modifications into Permits

Several parties to the hearing raised concerns regarding the implementation of current condition temporary modifications into permits, as described in WQCD Exhibit L. The commission was persuaded that the division has existing legal authority to proceed with implementation of these temporary modifications in the absence of a rule or policy addressing this specifically. However, the commission

believes it would be beneficial to develop a policy, and therefore requested that the division work toward developing a division policy about how the division will proceed with implementing current condition temporary modifications into permits. The commission requested that the division report back to the commission next year, potentially as part of the division's annual update to the commission regarding the 10-Year Water Quality Roadmap, regarding what the division believes is a reasonable timeline and process for developing such a policy. The commission encouraged the division to continue with its current efforts at transparency and implementation of current condition temporary modifications consistent with the evidence presented in the rulemaking, including Exhibit L, into permits prior to the development of a policy.
