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MEMORANDUM INITIAL WRITTEN COMMENTS

To: Dr. Andrew Todd, Chair, Water Quality Control Commission
Trisha Oeth, Administrator, Water Quality Control Commission

From: Clean Water Program Staff, Water Quality Control Division

Date: September 9, 2015

Subject: "Nutrients Management Control Regulation", Regulation #85 (5 CCR 1002-85) and Section 31.17 of "The Basic Standards and Methodologies for Surface Water", Regulation #31 (5 CCR 1002-31) Triennial Review Informational Hearing

In accordance with the Water Quality Control Commission's (commission) triennial review cycle of regulations, a Triennial Review Informational Hearing (TRIH) is scheduled for the "Nutrients Management Control Regulation", Regulation #85 (5 CCR 1002-85) and Section 31.17 of "The Basic Standards and Methodologies for Surface Water", Regulation #31 (5 CCR 1002-31) on October 13, 2015. This is the first triennial review of these regulations, which became effective September 30, 2012. The Water Quality Control Division (division) will request at the TRIH that the commission schedule a rulemaking hearing to address the issues presented in this memorandum, and will address at the hearing whether any issues presented to the commission from other stakeholders should be added to the scope of the hearing as well.

This memorandum provides a summary of the division's recommendation regarding potential Regulation #85 changes and transmits the larger progress report on Colorado's Nutrient Control Strategy. The progress report is organized into four sections:

- **Section 1** - Introduction and Background
- **Section 2** - Progress on Implementation of Regulation #85
- **Section 3** - Progress on Implementation of Section 31.17 of Regulation #31
- **Section 4** - Recommended Changes to Regulation #85 and 31.17 of Regulation #31

The division maintains our opinion that the approach taken in 2012 to adopt Regulation #85 and 31.17 of Regulation #31 was the right first step to reduce nutrients in Colorado. The approach allows for a two-part strategy for addressing nutrients and the division believes this is still the best policy option to make effective progress in addressing nutrients management in Colorado at this time. As a reminder this two-part strategy includes:

1. A new Nutrients Management Control Regulation establishing technology-based treatment requirements for many domestic and some industrial wastewater dischargers, enhanced nutrients control requirements for storm water dischargers, provisions encouraging voluntary controls of nonpoint sources, and monitoring requirements to develop better information to refine Colorado's nutrients management efforts over time. This control regulation is called Regulation #85.



2. Scientifically-based numerical values for nutrients at levels to protect classified uses of Colorado waters. These are initially to be applied only to streams and lakes above dischargers and to protect municipal water supplies taken directly from lakes or reservoirs. Section 31.17 of Regulation #31 contains the numerical values.

The attached progress report shows that the Regulation #85 monitoring requirements provide the division and Colorado's regulated community information that will be useful for determining the appropriate long-term nutrient control strategy for Colorado. In addition, the progress report summarizes the Regulation #85 and 31.17 of Regulation #31 implementation efforts and division believes that these efforts have been successful as we complete the first increment of nutrient reduction in Colorado.

Recommended Changes to Regulation #85 and Section 31.17 of Regulation #31

The division has organized its recommendations into five categories:

- Regulation #85 and Section 31.17 of Regulation #31 Phase 2 Effective Date
- Recommended Changes to 85.5 Specific Limitations for Dischargers of Nutrients
- Recommended Changes to 85.6 Monitoring Requirements
- Recommended Changes to Section 31.17 of Regulation #31
- General Clean-up and Corrections

I. Regulation #85 and Section 31.17 of Regulation #31 Phase 2 Effective Date

Section 31.17 of Regulation #31 states that after May 31, 2022 the interim phosphorus, nitrogen, and chlorophyll *a* values will be considered by the commission when applying numeric standards to individual segments. These segments would include locations downstream of permitted wastewater treatment facilities. In addition, Regulation #85 limitations could apply to domestic wastewater treatment works and nondomestic wastewater treatment works under the provisions outlined in 85.5(1)(a)(ii) Delayed Implementation of Effluent Limits after May 31, 2022. These effluent limits could be included in permits during the time when the commission is adopting the numeric standards during their typical basin implementation schedule.

The division recommends that the scope of the Regulation #85 and Section 31.17 of Regulation #31 rulemaking hearing include consideration of the Phase 2 Effective date of May 31, 2022. At the time of the hearing, the division may or may not propose a delay in the Phase 2 Effective Date based on:

- Examining technological advances in nutrient removal technologies and if these advances could achieve effluent limitations based Section 31.17 interim values.
- Determining whether monitoring will be required to establish Regulation #85 numeric effluent limitations effects on instream nutrient levels or if this could be accomplished using modeling.
- Establishing the timeframe required to implement a long-term nutrient strategy for Colorado by considering the following potential options:
 - Do nothing and implement Phase 2 as currently envisioned in Regulation #85 and Section 31.17 of Regulation #31.

- Delayed implementation of Phase 2 as currently envisioned in Regulation #85 and Section 31.17 of Regulation #31 based on technology availability and phasing of required capital expenditures statewide.
- More stringent effluent limitations for the approximately 50 facilities subject to current Regulation #85 effluent limitations.
- Identify the most critical areas of the state with respect to nutrients and identify nutrient controls required to protect the designated uses in those areas.

The division does not recommend consideration of revisions to the interim phosphorus, nitrogen, or chlorophyll *a* values in Section 31.17 of Regulation #31 at this time.

II. Recommended Changes to 85.5 Specific Limitations for Dischargers of Nutrients

Based on the division's experience with implementing Section 85.5 of Regulation #85 we recommend that the Regulation #85 rulemaking hearing consider the following:

- The division applied Regulation #85 to existing and new facilities. Based on this experience the division recommends Regulation #85 provide a definition of New Domestic Wastewater Treatment Works that will clarify and differentiate the term's use from other commission regulations such as Regulation #22 Site Location and Design Approval Regulations for Domestic Wastewater Treatment Works.
- For facilities not currently subject to the Regulation #85 effluent limitations, the division suggests that these facilities should be allowed to apply for and receive preliminary effluent limits (PELs). Regulation #85 does not allow the division to complete PELs for delayed implementation of effluent limits facilities. Since July 1, 2013, at least one facility requested PELs and the division was not able to accommodate their request.
- The division recommends that the scope of the rulemaking include whether the Regulation #85 effluent limitations should apply to cooling towers. Regulation #85 required cooling towers to submit monitoring data for two years to determine the relative amount of nutrient (if any) that is added to the flow diverted from state waters. The division will review this information and propose whether Regulation #85 effluent limits should apply to cooling towers.
- The division suggests section 85.5 include a reference to 85.6 (Monitoring Requirements). During implementation of Regulation #85 the division found many facilities excluded from effluent limits or that had delayed implementation of effluent limits were not aware that the monitoring requirements apply to all domestic wastewater treatment works and non-domestic wastewater treatment works in Standard Industrial Classification (SIC) Major Category 20.
- The division proposes that the scope of the rulemaking include the Regulation #85 trading provision. The provision as written takes into account instream water quality. While no nutrient trades have been implemented under Regulation #85, one permittee has met with the division to discuss trading and the trading scheme that was discussed at that meeting did not consider instream water quality but contemplated an overall balance in watershed nutrient loading. Prior to recommending any changes to Regulation #85 the division will consider the long-term implementation implications of allowing trades based on watershed loading versus instream water quality.

- The division recommends that the scope of the rulemaking consider whether Regulation #85 should to apply federally operated wastewater treatment works and whether references to Colorado Discharge Permit System permits should also include reference to National Pollutant Discharge Elimination System Permits.
- In the statement of basis and purpose for the 2012 rulemaking, the commission stated an intention to address future monitoring requirements for Municipal Separate Storm Sewer Systems (MS4s) in the first triennial review of Regulation #85. The Commission's stated intent was to use the information from the Discharge Assessment Data Reports to understand the significance of MS4s as nutrient sources. The commission also stated the intent to review the information in the Discharge Assessment Data Reports in evaluating the requirements in 85.5(4) for "Municipal Separate Storm Sewer (MS4) Permit Requirements for Nutrient Source Reductions." Given the Event Mean Concentration value ranges for discharges from MS4s provided in the reports relative to current limits for other point source discharges included in the Regulation #85, the division does not recommend that further nutrient reduction requirements be evaluated for inclusion in Regulation #85 during this triennial review. Instead, the division recommends that the commission continue to rely on the current requirements in 85.5(4) and the requirements in Regulation #61, which direct that CDPS discharge permits for MS4s incorporate requirements for permittees to reduce pollutants, including nutrients, in discharges to the maximum extent practicable. The division will continue to reevaluate its recommendation for future triennial reviews based on current information and evaluation of the relative contributions from MS4s.

III. Recommended Changes to 85.6 Monitoring Requirements

Based on the division's experience with implementing Section 85.6 of Regulation #85 we recommend that the Regulation #85 rulemaking hearing consider the following:

- There is no end date for the Regulation #85 monitoring requirement. The division recommends the scope of the rulemaking include a monitoring end date. We will propose a recommendation for an end date after reviewing data submitted as part of Regulation #85 monitoring requirements, considering the amount of data required to establish a baseline condition, and evaluating whether it is necessary to monitor after each of the approximately 50 facilities have the capability to comply with the Regulation #85 effluent limits.
- In the statement of basis and purpose for the 2012 rulemaking, the commission stated an intention to address future monitoring requirements for Municipal Separate Storm Sewer Systems (MS4s) in the first triennial review of Regulation #85. The Commission's stated intent was to develop future regulatory requirements for monitoring, as necessary, to adequately characterize nitrogen and phosphorus contributions from MS4 discharges in Colorado. The commission also stated the intent to review the information in the Discharge Assessment Data Reports in evaluating the requirements in 85.5(4) for "Municipal Separate Storm Sewer (MS4) Permit Requirements for Nutrient Source Reductions." After review, the division recommends that the reports provide adequate information and data at this time for the evaluation and consideration of relative nutrient contributions from MS4 discharges in Colorado. It is therefore the recommendation of the division that no additional reporting requirements for discharges from MS4s be considered for Regulation #85 during this triennial review. The division intends to reevaluate this recommendation for future triennial reviews pending the further analysis of data, including statewide modeling efforts currently underway.

IV. Recommended Changes to Section 31.17 of Regulation #31

Based on the division's experience with implementing Section 31.17 of Regulation #31 we recommend that the Section 31.17 of Regulation #31 rulemaking hearing consider the following:

- The division recommends the scope of the rulemaking include clarifications for 31.17(e)(i) or the provision identifying where the 31.17 interim values can be applied prior to May 31, 2022. During the 2014 Regulation #37 rulemaking, the commission determined that Section 31.17 interim values should not be implemented downstream of a cooling tower that was not subject to Regulation #85 effluent limits. In both the 2014 Regulation #37 and 2015 Regulation #38 hearing the commission heard discussion on the meaning of "headwaters" and whether the 31.17 interim values should only be implemented in waters of "high quality". As part of the scope of the Regulation #85 and Section 31.17 of Regulation #31 rulemaking, the division will propose changes to 31.17 consistent with the Commission policy decisions during recent #37 and #38 rulemakings.

V. General Clean-up and Corrections

The division expects there to be several types of general cleanup and corrections that would increase the usability and clarity of Regulation #85. The division will also propose to correct typographical and other minor errors. The division's current list of clean-up items for Regulation #85 includes:

- The division proposes all references to running annual median be changed to rolling annual median. Running and rolling are equivalent terms but rolling medians and rolling averages are the terms used in permit implementation polices.
- Include the Hydrologic Unit Code numbers with the watershed names in 85.5(1)(a)(ii)(C).
- Remove reference to the PQLs and Regulation #61 in 85.6(4)(c).
- In several places throughout the regulation there are dates that are no longer relevant and these should be removed.
- Clarify the statement in 85.6(6) for the data submittal through a public repository to read that the Division must be notified by April 1st (not April 15th) that the data will be submitted via a data repository. Also clarify that the data repository must submit the data to us and make it accessible to the public.
- The information required in 86.6(3) Point Source Data Collection - Municipal Separate Storm Sewer System Discharges has been provided to the division and this portion of the regulation can be deleted.
- The cooling tower data collection requirement in 85.6(2)(a) has been fulfilled and can be deleted.

Next Steps

We have outlined the division's recommendations for the scope of the rulemaking in Items I through V above. Should the commission decide to move forward with a rulemaking, the division anticipates that the Colorado Water Quality Forum will form a Regulation 85/31.17 Work Group

during the summer of 2016 to collaborate on the proposal for the rulemaking effort, and that a rulemaking hearing could be scheduled for the fall of 2017.