

A scenic river landscape with mountains in the background and a rocky foreground. The river flows through a valley with trees and grasses. The foreground is dominated by a large number of smooth, rounded rocks of various sizes, some partially submerged in the water. The water is clear and reflects the sky. In the background, there are mountains under a blue sky with some clouds. The overall scene is peaceful and natural.

Regulation #85 Work Group

November 1, 2016

Meeting Details

- Conference call-in: 1-857-216-6700
conference code: 425132
- Adobe Connect:
<https://cdphe.adobeconnect.com/reg85mtg>
- Wi-Fi
 - Network: HealthyColorado
 - User ID: guest
 - Password: Diabete\$



Agenda Review

A large center pivot irrigation system is shown in a vast, golden field at sunset. The long metal arm of the system extends from the foreground towards the horizon, supported by several towers. Water is being sprayed from the end of the arm, creating a misty atmosphere. The sky is a mix of blue and orange, with the sun low on the horizon. The field is filled with mature, golden-brown crops.

Regional and National Updates

EPA Nutrient Action Letter - Regulation 31

Section	Description	EPA Action
31.9(1)(c)	Critical low flows	Approved
31.13(1)(d)(i)	DUWS sub-classification	Approved
31.17(b), (c)	TP and TN Interim Values for Rivers/Streams	No Action
31.17(d)	Chlorophyll-a Interim Values <ul style="list-style-type: none"> ● Streams/Rivers ● Lakes/Reservoirs ● DUWS Sub-classification 	Approved
31.17(h)	Site-specific flexibility	Approved
31.17(e), (f), (g)	Phased application provisions	No Action
31.17(b), (c)	TP and TN Interim Values for Lakes/Reservoirs	Approved with recommendations

Joel Beauvais Memo

- Recent examples of continuing problem
- Nutrient reductions from all sources
 - Prioritizing watersheds and setting load reduction goals
 - Reducing point sources of nutrient pollution
 - Reducing nutrient loads from nonpoint sources
 - Continued progress on developing nutrient criteria
 - Financial assistance
 - Transparency and accountability
 - Need for further action



Overview of Stakeholder Process and Goals

Overview of Stakeholder Process and Goals

- Goal: Successful August 2017 Rulemaking
- Process
 - Division's October 2015 memo to the WQCC
 - Scope of Rulemaking
 - Agendas for Meetings #2 & #3

Division's October 2015 Memo to the WQCC

- Progress of Implementation of Regulation #85
- Monitoring Requirements
- Regulation #85 Data Analysis and Summary
- Progress on Implementing Regulation #31
- Recommended Changes to Regulation #85 and 31.17 of Regulation #31

Scope of Rulemaking

1. Regulation #85 and Section 31.17 of Regulation #31
Phase 2 Effective Date
2. 85.5 Specific Limitations for Dischargers of Nutrients
3. 85.6 Monitoring Requirements
4. Section 31.17 of Regulation #31
5. General Clean-up and Corrections

SCOPE: Regulation #85 and Section 31.17 of Regulation #31 Phase 2 Effective Date

- May 31, 2022
 - Commission could adopt interim phosphorus, nitrogen and chlorophyll 'a' values downstream of wastewater facilities
 - Regulation #85 could apply to all facilities >1.0 MGD unless located in a disadvantaged community
- Division recommended that scope of hearing include recommendation on Phase 2 effective date

SCOPE: 85.5 Specific Limitations for Dischargers of Nutrients

- Definition of “new” domestic wastewater treatment works
- Allow all facilities to request preliminary effluent limits
- Reference monitoring requirements
- Federal facilities
- Cooling towers
- Trading
- SIC 20 Facilities

SCOPE: 85.6 Monitoring Requirements

- Monitoring end date

SCOPE: Section 31.17 of Regulation #31

- Clarifications to 31.17(e)(i) to be consistent with recent commission policy decisions about headwaters

SCOPE: General Clean-up and Corrections

- General clean-up and corrections to increase usability and clarity of Regulation #85
- Fix typographical and other minor errors

Meeting #2 and #3 Dates and Locations

- Meeting #2: Thursday, January 12, 2017
 - 1-4 pm
 - Lab training room (here)
- Meeting #3: Monday, March 6, 2017 1-4 pm
 - 1-4 pm
 - Lab training room (here)

Meeting #4 - Optional/If Needed

- Wednesday, April 12, 2017
 - 1-4 pm
 - Rosiland Franklin Room (CDPHE Lab)

Meeting #2 Agenda Topics

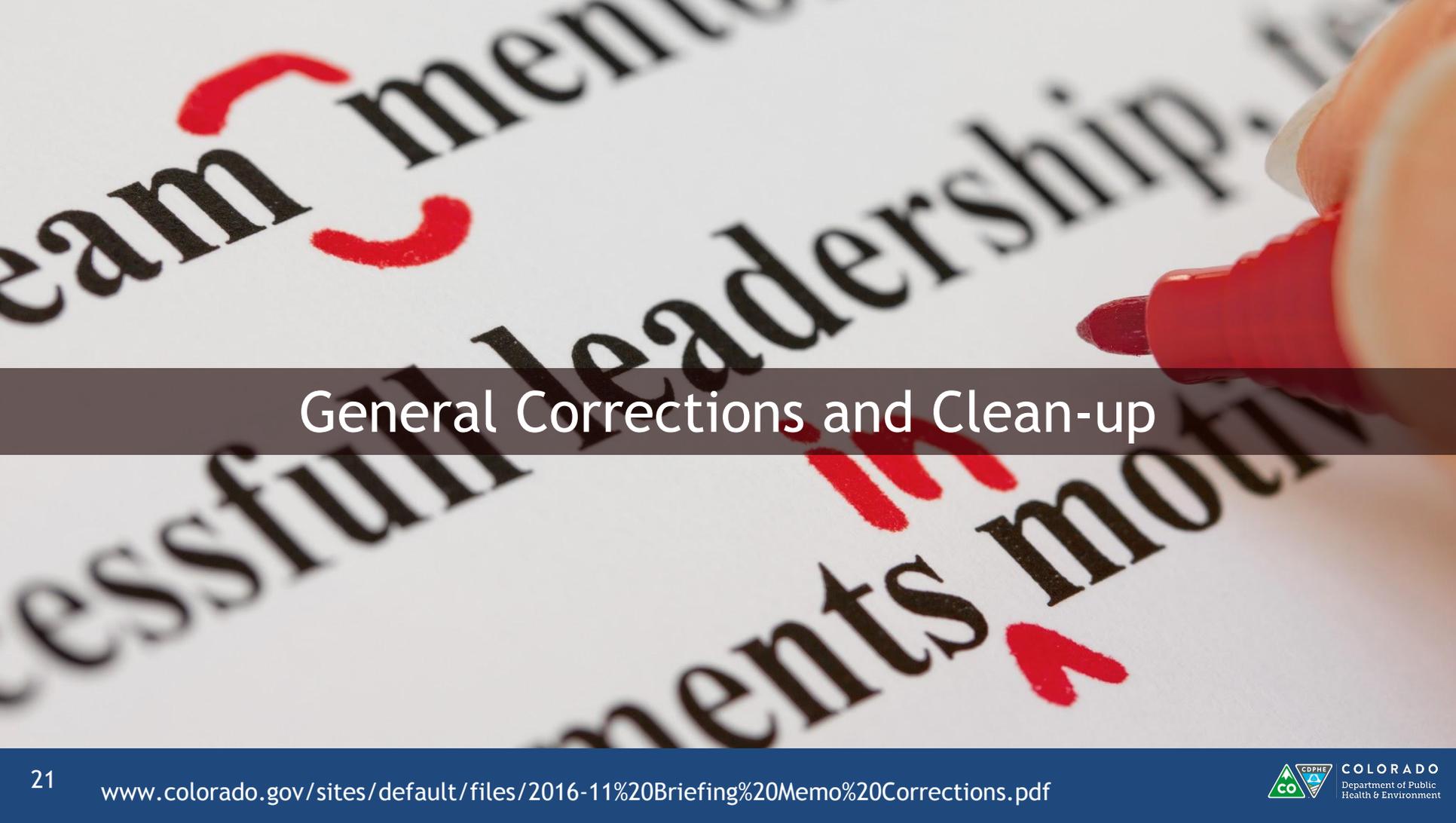
- Follow-up from Meeting #1
 - Headwaters
 - Nutrient trading
 - PELs
 - Federal facilities
 - Clean-up and corrections
- Phase 2 implementation (continued)
- WQCC request for an update on nutrient removal technologies

Meeting #3 Agenda Topics

- Meeting #1 and #2 recap
- Phase 2 follow-up
- Regulation #85 monitoring
 - 2015 data summary
 - Length of monitoring requirements (end date)
 - Monitoring requirements for MS4 permits
 - Statewide modeling effort (nonpoint source efforts)

Work Group Subcommittees

- SIC 20 effluent limitations.
- Regulation #31 and #85 effective date.
- Cooling tower effluent limits.
- Additional subcommittees?



General Corrections and Clean-up

A photograph of a water treatment plant. In the foreground, two large, bright blue pipes run parallel to each other, supported by a metal railing. The pipes lead to aeration tanks where water is being treated, with visible bubbles and foam. In the background, there are several large white industrial buildings and tall cylindrical storage tanks. The sky is clear and bright.

Clarify - New versus Existing Treatment Works

New Versus Existing Treatment Works

- “Existing” not well defined.
 - Groundwater.
 - Reuse.
- Other regulatory definitions.
 - Regulation 61.
 - Regulation 22.
- Examples.
- Continue with existing practice.
- Propose adding clarifying definitions only.



Headwaters



PELs for Regulation 85 - effluent limitations



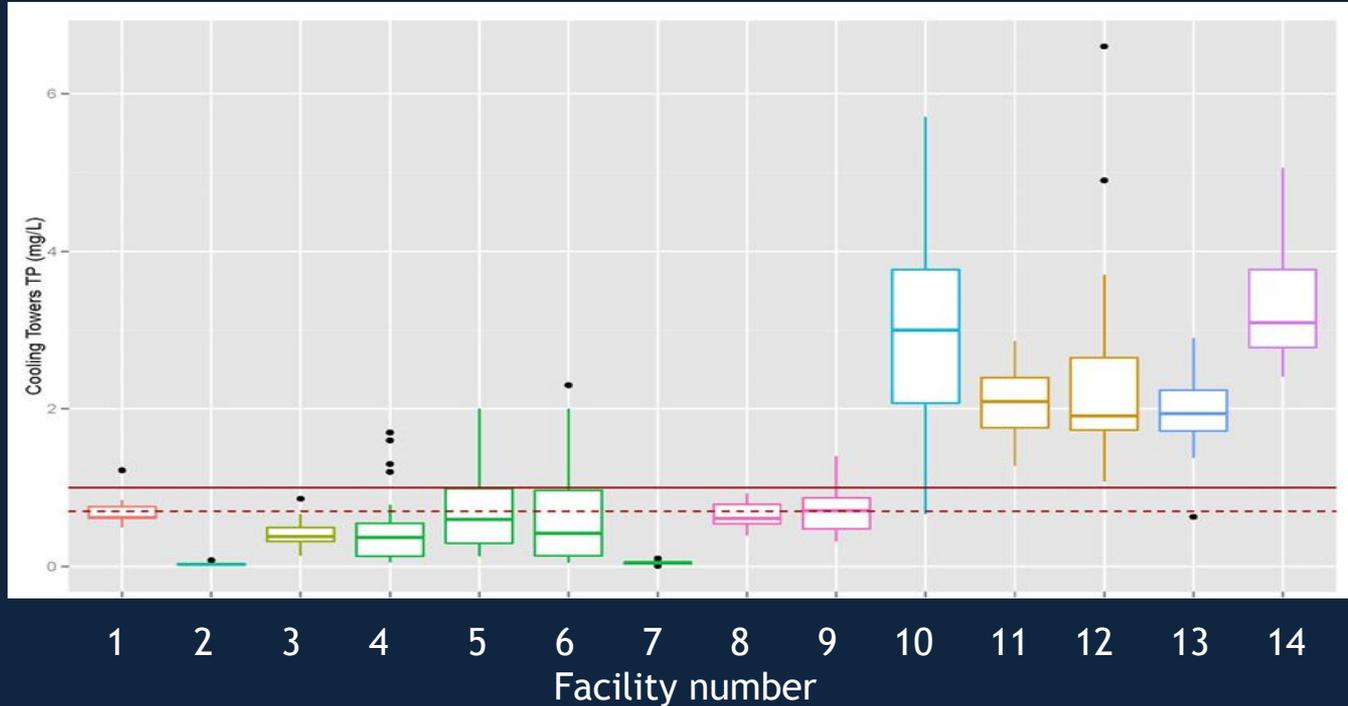
Cooling Towers

Cooling Towers - Data Report

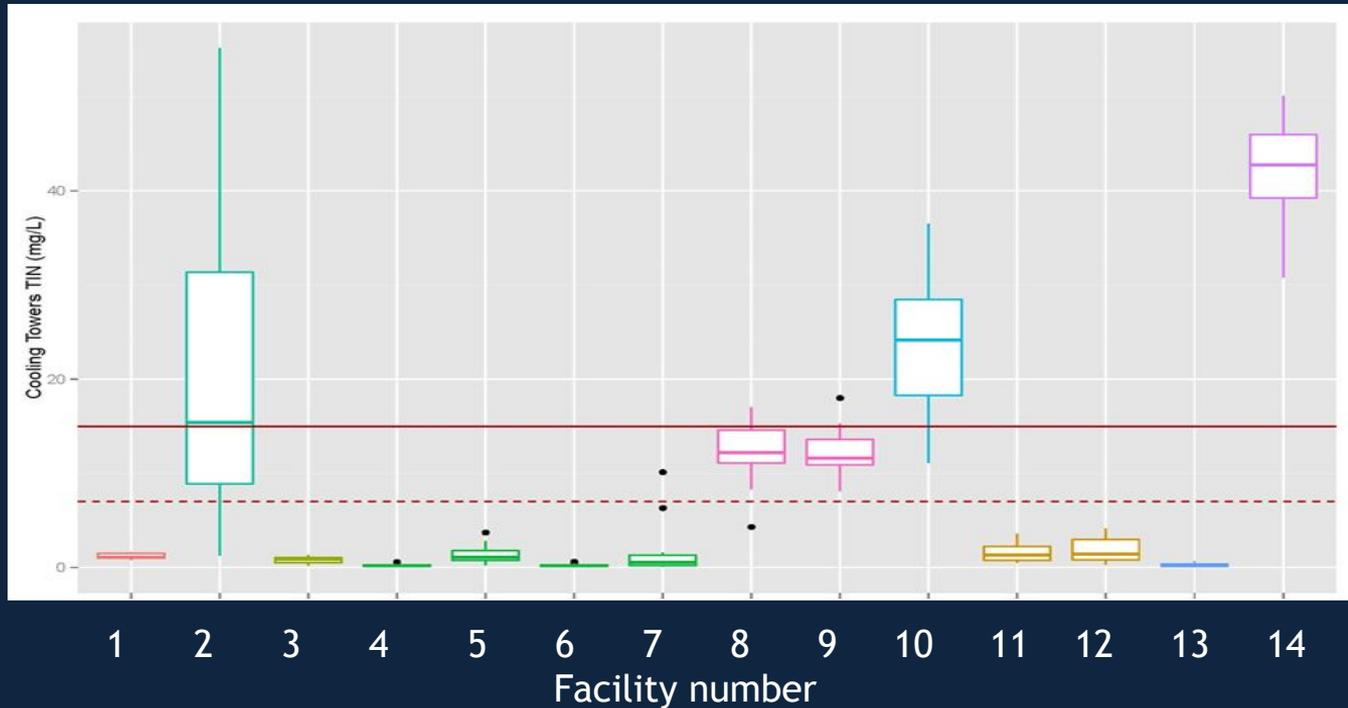
- Two years of monitoring: November 2012 - October 2014.
- Monitoring of flow, TP, TN & TIN from inflow, discharge, and added chemicals.
- 80% of cooling tower facilities submitted data report to division by February 28, 2015.

Regulation 85.6(2)(a)

Cooling Towers - TP in Blowdown (Discharge) Versus Annual Median Limits



Cooling Towers - TIN in Blowdown (Discharge) Versus Annual Median Limits



Cooling Towers - Recommendation

- No further sampling is required.
 - Delete cooling tower section from 85.6(2)(a).
- More information needed to understand nutrient loading from cooling towers.
 - Need small group to decide whether effluent limits should apply.



Nutrient Trading



Federal Facilities

Federal Facilities

- It appears that applicability of the regulation to federal facilities was not evaluated as part of the hearing process
- A plain read of the language concludes
 - Monitoring requirements do apply
 - Effluent limits do not apply
- The division is in dialogue with EPA and plans to bring forward a recommendation for the next stakeholder meeting



Phase 2 Timing

What Is Phase 2 or What Happens If We Do Nothing?

- 31.17: after May 31, 2022 the interim phosphorus, nitrogen, and chlorophyll *a* values will be considered by the commission when applying nutrient standards to individual segments.
 - Could be applied downstream of all facilities even those excluded in Regulation #85 (less than or equal to 1.0 MGD or a disadvantaged community).

What Is Phase 2 or What Happens If We Do Nothing? (con't)

- Regulation #85: effluent limitations could apply to DWWTW and nondomestic wastewater treatment facilities covered under the delayed implementation provisions.
 - DWWTW subject to control regulations.
 - DWWTW with design capacity greater than 2.0 MGD.
 - Existing DWWTW and Non-DWWTW discharging to a low priority watershed.

Options Outlined in Division's September 2015 Memo to Commission

- Examining technological advances in nutrient removal technologies and if these advances could achieve effluent limitations based on 31.17 interim values.
 - Delay this analysis until we have approved numeric 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.

Options Outlined in Division's September 2015 Memo to Commission (con't)

- 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.
 - Delayed implementation of Phase 2 as currently envisioned in Regulation #85 and Section 31.17 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 designated uses in those areas.

Reg #31.17 Topics for Subcommittee Discussion

- Except for chlorophyll *a*, a delay will likely be necessary as it is unlikely that TN and TP numbers will be updated and approved by 2022.
- Leave 31.17 May 31, 2022 date alone and rely on “will be considered” and “where necessary” language in 31.17(g)?
- Develop nutrient reduction strategy and incorporate standards revision and implementation as part of strategy (consistent w/ Beauvais memo)?
- Chlorophyll *a* - do we move forward after 2022?

Reg #85 Topics for Subcommittee Discussion

- Do nothing?
- Delayed implementation of Phase 2 as currently envisioned?
- More stringent effluent limitations for facilities currently subject to Regulation #85?
 - Drinking water protection?
- Identify more critical areas of the state protect and expand regulation coverage and then phase/delay based on this information?
 - Hazardous Algae Blooms/Lakes?
- Monitoring to support standards development?
- Nonpoint sources?



Feedback - Next Meeting