

Cross-Program Coordination on Water Quality Standard Variances

September 17, 2019 | Water Quality Control Division



COLORADO
Department of Public
Health & Environment

Regulatory and Policy Background

- **2010** - Regulation 31 - *The Basic Standards and Methodologies for Surface Water* revised to include criteria for granting variances
- **2013** - Policy 13-1 - *Guidance for Development, Adoption and Review of Discharge Specific Variances (DSVs)*
- **2015** - EPA adopts federal rule 40 CFR 131.14 - *Water Quality Standard Variances*
- **2019** - Policy 13-1 - Revised to reflect Commission decisions since 2013 and conform to the federal rule

40 CFR 131.14- Water Quality Standards Variances

Five ways to express variances...

A. For discharger-specific WQS variances:

- (1) The highest attainable interim criterion; or
- (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... and the adoption of a Pollutant Minimization Program.

B. For WQS variances applicable to a water body or waterbody segment:

- (1) The highest attainable interim use and interim criterion; or
- (2) If no additional feasible pollutant control technology can be identified, the interim use and interim criterion that reflect the greatest pollutant reduction achievable with the pollutant control technologies...and the adoption of a Pollutant Minimization Program.

Colorado Approved DSVs

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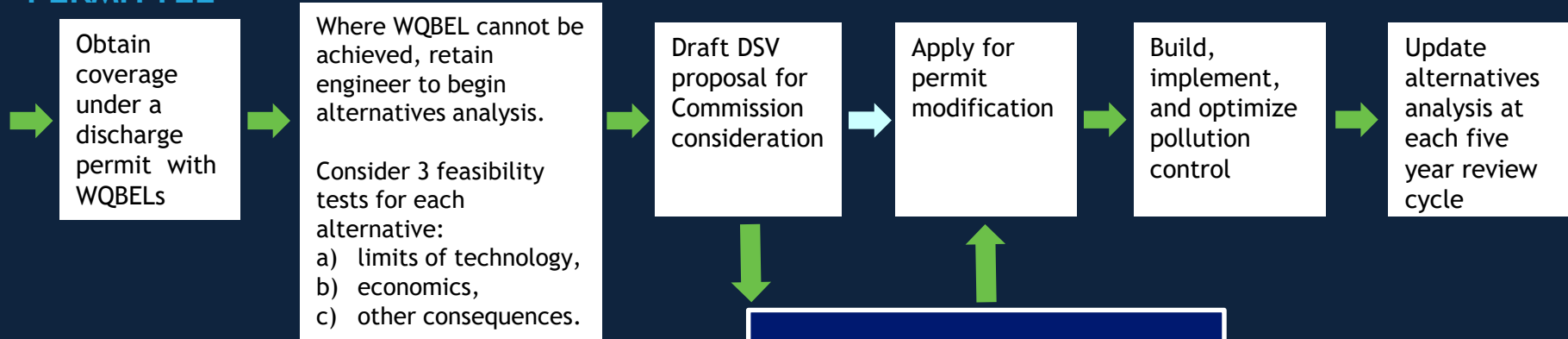
Discharger	Permit #	Parameter	WQBEL Based on Underlying Standard	DSV (Alternative Effluent Limit)	WQCC Rulemaking Hearing	Approved by EPA?	Implemented in Permit?
Durango West Metro District No 2 Wastewater Treatment Plant	COG589115	Ammonia (ac/ch)	TVS equation (ranges from 2 - 5 mg/l)	15 mg/l (30-day avg)	Aug 2014	Yes	Yes
Town of Nucla Wastewater Treatment Plant	CO0048945	Ammonia (ac/ch)	TVS equation (ranges from 2 - 5 mg/l)	8.3 mg/l summer 13.8 mg/l winter (30-day avg)	Oct 2016	Yes	Yes
Suncor Energy (USA) Inc. Commerce City Refinery	CO0001147	Selenium (ac/ch)	9 ug/l (30-day avg) 18 ug/l (daily mx)	24 ug/l (30-day avg)	Oct 2016	Yes	Yes

Colorado Approved DSVs

Discharger	Permit #	Parameter	WQBEL Based on Underlying Standard	DSV (Alternative Effluent Limit)	WQCC Rulemaking Hearing	Approved by EPA?	Implemented in Permit?
City of La Junta Wastewater Treatment Plant	CO0021261	Selenium (ac/ch)	4.6 ug/l (30-day) 18 ug/l (daily mx)	0.37 lbs/day (12-month rolling avg.) Plus narrative requirements in PMP	Oct 2016	Yes	Yes
City of Pueblo James R. Dilorio Water Reclamation Facility	CO0026646	Selenium (ac/ch) ---- Sulfate (ch)	Selenium 14.1 ug/l (30-day) 19.1 ug/l (daily mx) ---- Sulfate 329 mg/l (30-day)	Narrative requirements in PMP	June 2018	Yes	Not yet
City of Las Animas Wastewater Treatment Plant	CO0040690	Selenium (ch only)	4.6 ug/l (30-day)	Narrative requirements in PMP	June 2018	Yes	Not yet

WQBEL to DSV Pathway

PERMITTEE



Water Quality Control Commission:

- Determine whether compliance with WQBEL is feasible, or DSV is justified.
- Adopt the alternate numeric or narrative effluent limit (AEL).
- Set AEL expiration date.
- Re-evaluate according to schedule.

WQCD - Standards Unit

DSV Roles and Responsibilities

- Manage and coordinate DSV process with all internal and external stakeholders
- Serve as primary point-of-contact
- Lead on reviewing and evaluating:
 - Permittee's economic capability per EPA's *Interim Economic Guidance for Water Quality Standards*, March 1995
 - Economic feasibility of each alternative
- Review DSV proposal for completeness
- Prepare hearing documents



WQCD - Permits Section

DSV Roles and Responsibilities

- Review and evaluate the need for a DSV
 - Are other permitting or regulatory options available? (e.g., longer compliance schedule, de-rating the system, relocating the outfall)
- Identify and develop permit terms and conditions:
 - Data collection, monitoring, and reporting requirements
 - Other requirements (e.g., pollutant minimization plan, special studies)
 - Compliance schedules (e.g., interim limits to ensure water quality does not degrade during DSV term)
 - Implement final numeric or narrative AEL

WQCD - Engineering Section

DSV Roles and Responsibilities

- Assist permittee in developing DSV proposal
- Lead on reviewing and evaluating:
 - Source and fate of pollutant
 - Technological capability/feasibility of each pollutant control alternative
 - Accuracy of cost estimates
- Critical role in:
 - Modeling pollutant effluent concentrations and expected water quality improvement
 - Ranking alternatives
 - Developing final recommended numeric or narrative AEL



WQCD - Grants and Loans

DSV Roles and Responsibilities

- Identify and refer permittees that may need a DSV
- Assist the Standards Unit in evaluating permittee's economic capability
- How much debt does permittee hold?
- Would the permittee qualify for grant funding?
- Is funding available for the selected alternative?



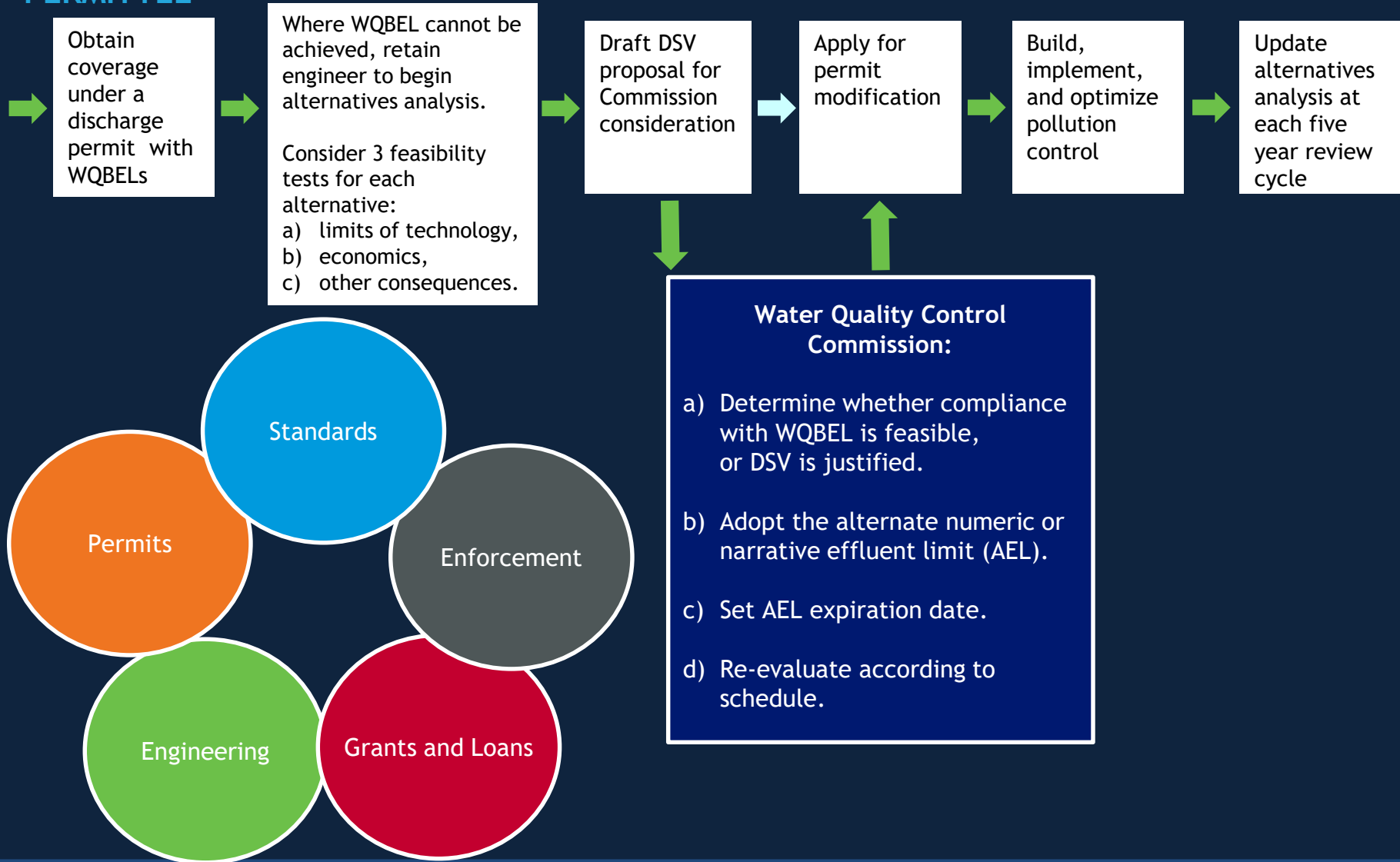
WQCD - Enforcement Unit

DSV Roles and Responsibilities

- Identify and refer permittees that may need a DSV
- *Goal* is to assist permittees with DSV process before formal enforcement is required
- Track and coordinate with the DSV process to ensure consistent communication, requirements, and timelines

WQBEL to DSV Pathway

PERMITTEE



Challenges and Opportunities

- Developing sector-wide or state-wide variances
 - Selenium in dewatering sector discharges
 - Nutrients criteria state-wide
- How to scale-up variances without adding time and workload to individual permit writers?
- Challenges with implementing, tracking, and measuring the success of narrative alternate effluent limits (AELs)

Contact Information

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Water Quality Control Division
www.coloradowaterpermits.com

Water Quality Control Commission
www.colorado.gov/cdphe/wqcc