

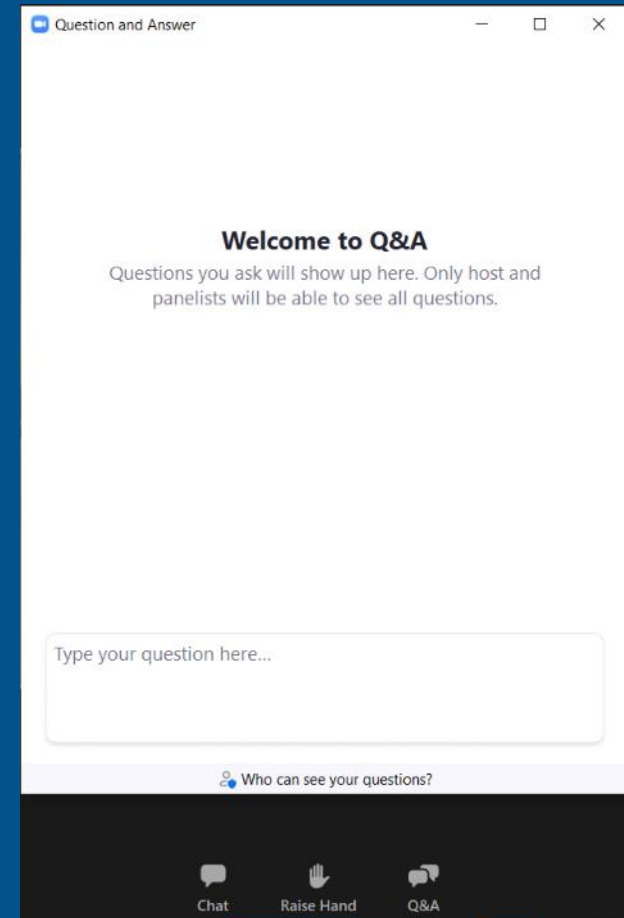


Draft Temporary Water Quality Standards Variance Rules: Informational Webinar

June 16, 2022

Welcome!

- This meeting is a webinar
- Raise your hand or use the Q&A feature to ask questions during the Q&A portion of the meeting at the end
- *9 raises your hand if you're on the phone
- State your name and affiliation before providing your comment



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Raise Hand

Q&A

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Agenda

Meeting Purpose: DEQ Water Quality Standards staff will explain the content and intent of the draft variance rules

- Temporary Water Quality Standards Variance Rule Overview
- Question and Answer Session

What are Water Quality Standards?

- Beneficial uses such as recreation, aquatic life, drinking water, agriculture
- Water quality criteria (numeric and narrative)
- Nondegradation = protection of high-quality waters



What is a Temporary Water Quality Standards Variance?

- CWA tool – regulations found in 40 CFR 131.14
- A time limited, customized water quality standard that identifies the highest attainable condition applicable throughout the term of the variance
 - A tool to be used if a WQS can't be met due to specific factors
 - Preferable to permanent removal and downgrade of a waterbody's beneficial uses
 - Allows time for treatment technology to advance and become less cost prohibitive
- Variances are designed to encourage compliance with the Montana Water Quality Act and federal Clean Water Act within a reasonable timeframe

What Factors can be Used to Justify a Variance?

(1) Naturally occurring pollutant concentrations prevent the attainment of the use; or

(2) Natural, ephemeral, intermittent or low flow conditions or water levels prevent the attainment of the use,

(3) Human caused conditions or sources of pollution prevent the attainment of the use and cannot be remedied or would cause more environmental damage to correct than to leave in place; or

(4) Dams, diversions or other types of hydrologic modifications preclude the attainment of the use,

(5) 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; or

(6) Controls more stringent than those required by sections 301(b) and 306 of the Act would result in substantial and widespread economic and social impact.

NEW RULE I: Temporary Water Quality Standards Variances

- Implementing rules for 2019 legislation (75-5-320, MCA)
 - *Department may adopt rules providing criteria and procedures for the department to issue a temporary variance to water quality standards if: (certain conditions are met)*
- These rules require conformance with 40 CFR 131.14
- Applicable to all pollutants and available variance factors under CFR 131.14
- Modeled closely after variance rules in 17.30.661 which are specific to upstream anthropogenic sources (adopted and approved by EPA in 2018)

Evaluating Reasonable Alternatives to a Variance

- NEW RULE I Sections 3 and 4: Describe instances where an alternative to a variance may be applicable and eliminate need for a variance
- Examples: a permit compliance schedule, reuse, trading or land application opportunities or a TMDL where the permittee is meeting the waste load allocation
- DEQ will work with permittee to determine if there are alternatives; important because the development of a variance is a commitment of effort and time for both the permittee and DEQ

How is Highest Attainable Condition (HAC) Defined?

In federal regulations, the highest attainable interim criterion or the interim effluent condition that reflects the greatest pollutant reduction achievable

In Montana, this has translated as the highest cost for effluent treatment a community would be asked to pay based on the state's economic affordability process

- Process well defined for publicly-owned systems

Economic Affordability Process

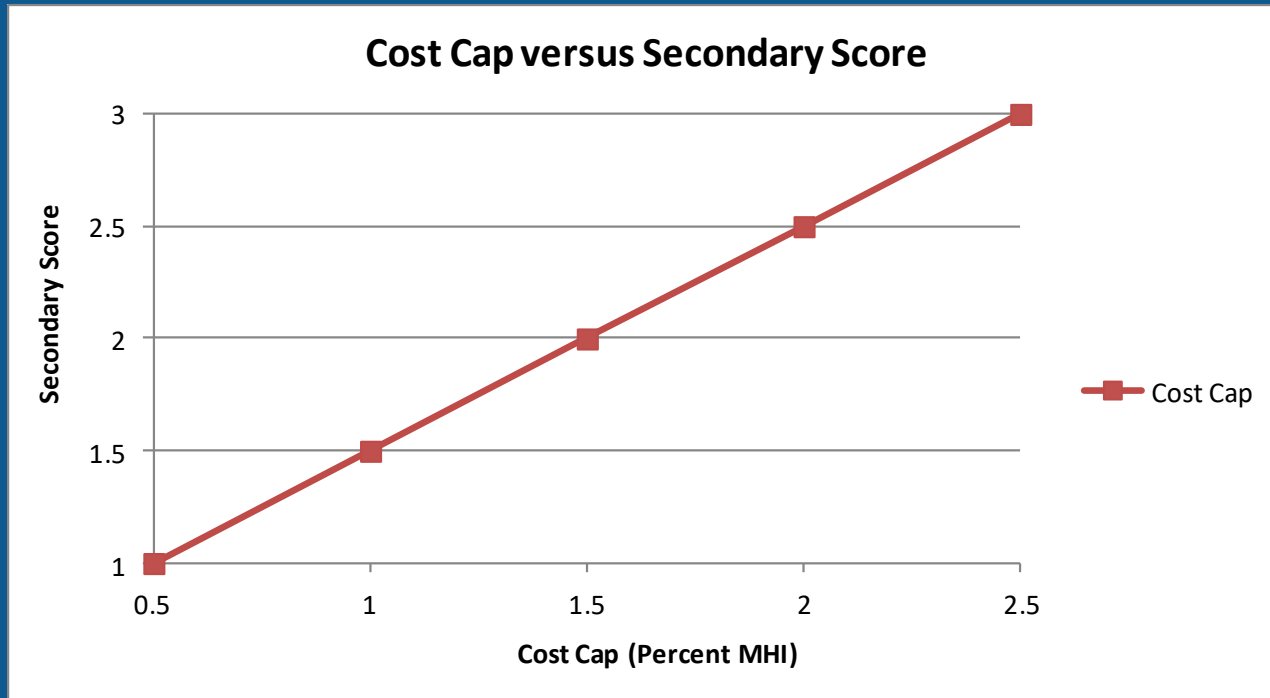
- Developed by DEQ with municipalities, wastewater engineers, environmental advocates, other MT stakeholders in late 2000s
 - Accepted by EPA
- Step 1: Estimate project cost that would occur from meeting the water quality standard; calculate its annual cost
- Step 2: Calculate total annualized pollution control cost per household, including existing wastewater fees, and the new pollution control project (as an increase in the household wastewater bill)
- Step 3: Calculate Municipal Preliminary Screener score based on the new wastewater fees and the community's Median Household Income. This step identifies communities that can readily pay for the pollution control project vs. those that cannot.

Economic Affordability Process, cont.

- Step 4: Carry out Secondary Test, derive Secondary Score. Test characterizes the socio-economic and financial well-being of households in the community and comprises five evaluation parameters which are compared against state averages:
 - Poverty rate
 - Percent low to medium income in community
 - Unemployment rate
 - Median household income (MHI)
 - Property tax, fees, and revenues divided by MHI and indexed by population
- Step 5: Assess where the community falls in the substantial impacts matrix. The matrix evaluates whether a community is expected to incur substantial economic impacts due to the implementation of the pollution control costs. If the applicant demonstrates substantial impacts, the applicant moves to the widespread test.
- Step 6: The widespread test comprises questions asking the applicant about current economic, social, and population trends in the affected area
- Step 7: If widespread impacts are shown, an applicant is eligible for an individual variance after demonstrating to DEQ they also considered alternatives to discharging (e.g., land application, permit compliance schedule).

The Process Defines the Affordability Cap

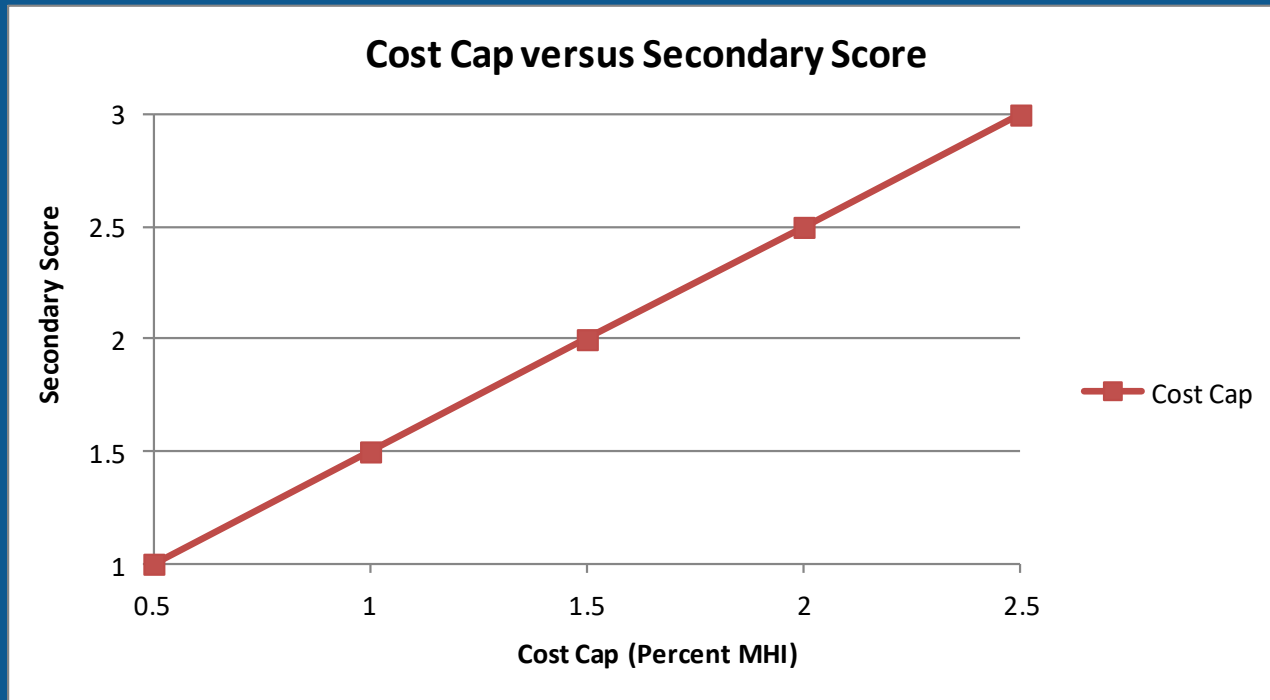
If substantial and widespread impacts were demonstrated



Example: Secondary score for a community = 2, affordability cap would be 1.5% of MHI (including \$ currently spent on sewer bill). If the community is currently paying $\geq 1.5\%$ of MHI for wastewater, the community would not have to upgrade its wastewater treatment due to the water quality standard

The Process Defines the Affordability Cap

If substantial and widespread impacts were demonstrated



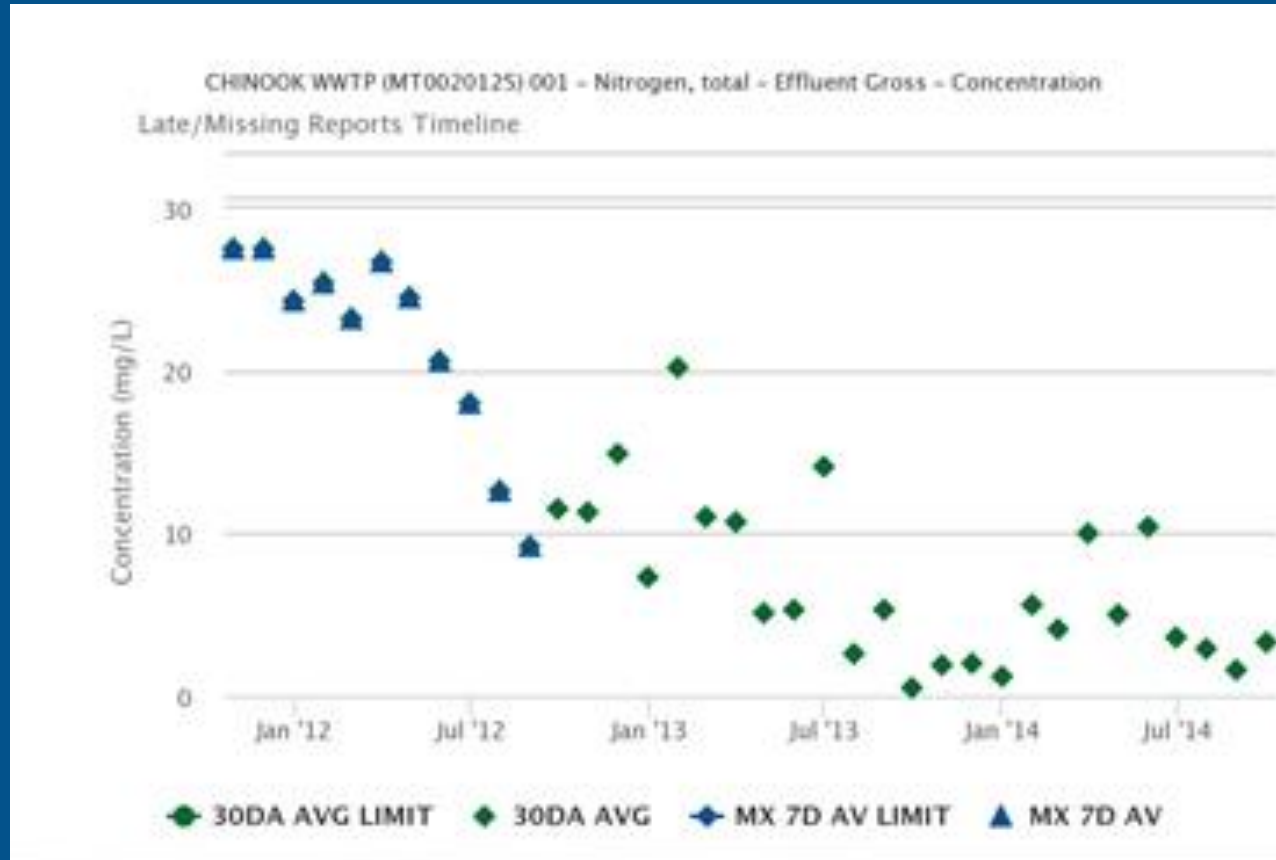
Example 2: Secondary score for a community = 2, affordability cap is 1.5% of MHI (including \$ currently spent on sewer bill). If the community is currently paying 1.0% of MHI for wastewater, the facility would be required to upgrade wastewater treatment with the dollar value differential between 1% and 1.5%, as annualized O&M.

Optimization Requirement

Permittees applying for a variance must carry out an optimization study that:

- Address facility operations and maintenance of existing infrastructure
- Not generally result in rate increases or major investment

Benefits of Facility Optimization



Approved variances require that the actions identified in the optimization study are implemented at the facility as part of their MPDES permit
(NEW RULE 1 (5))

Pollutant Minimization Program (PMP)

- Required after highest attainable condition (HAC) of the variance is achieved
- PMP comprises activities beyond facility optimization and the achievement of the highest attainable condition
- Included in NEW RULE I (2)(k)(iii) and in federal regulations at 40 CFR 131.14
- Example activities to examine include:
 - *Breweries/distilleries – what is in their cleaning compounds. How do they dispose of the cleaning waters? Drain, recycle, any treatment?*
 - *Laundries – what is in their cleaning compounds?*
 - *Trucked pollutants*
 - *Restaurants or hospitals: potential nutrient sources related to the discharge of food waste, soaps, and detergents*
 - *Illicit or non-illicit connections to sewers*

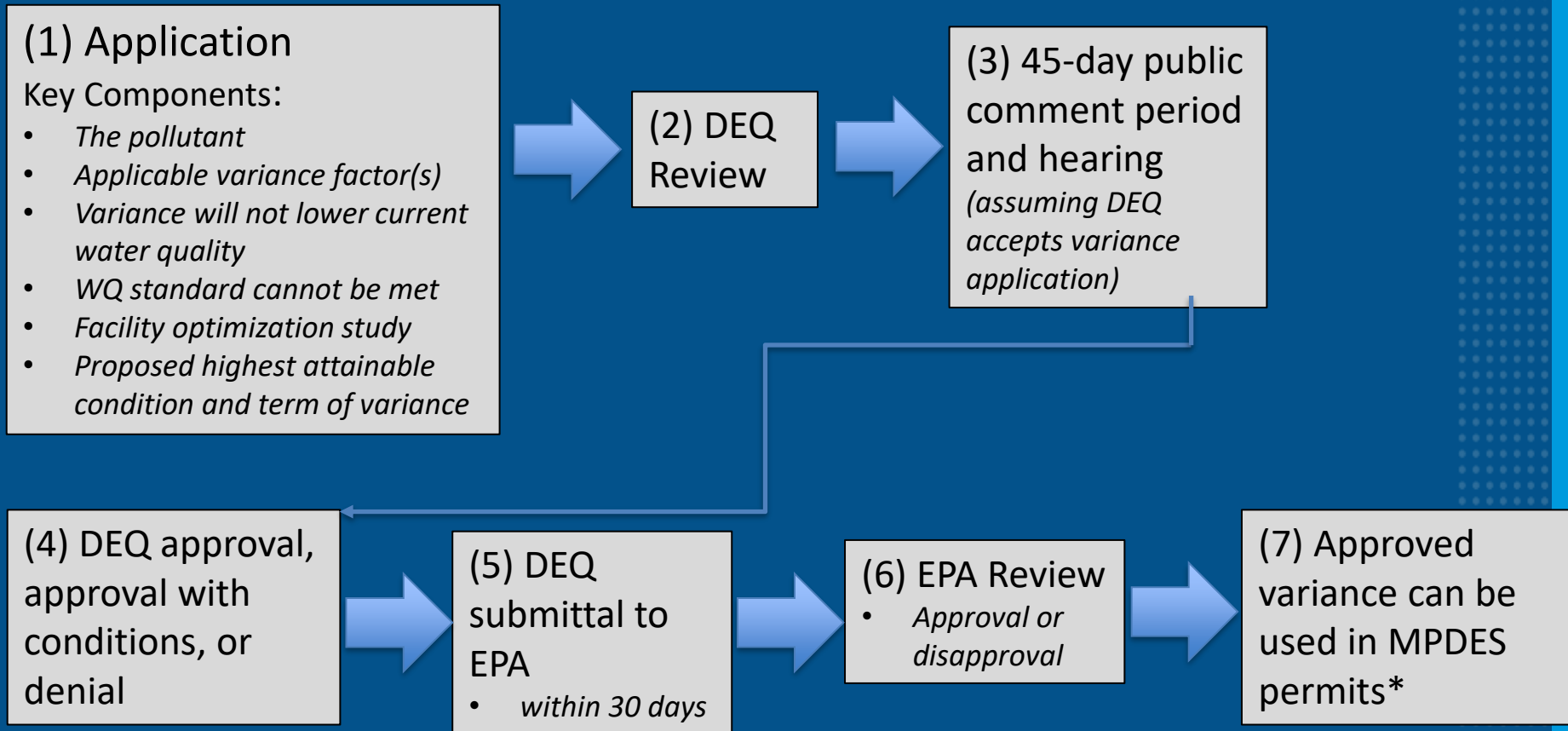
And any actions to help address any of the above

Variations Developed by DEQ

Per NEW RULE I (10)

- In many cases permittees will lead the work to support their application for an individual variance; DEQ will work closely with permittee and EPA in this process
- Situations may arise for which DEQ itself may develop variations
- DEQ has indicated to the Nutrient Work Group that a multi-discharger variance for nutrients for small community wastewater lagoons is a good approach
 - There is sufficient commonality among systems to do this
 - DEQ would lead this effort

Variance Rule: Procedural Overview



*Variances require a reevaluation every 5 years

Pre-Rulemaking Opportunities to Comment and Learn about this Rule

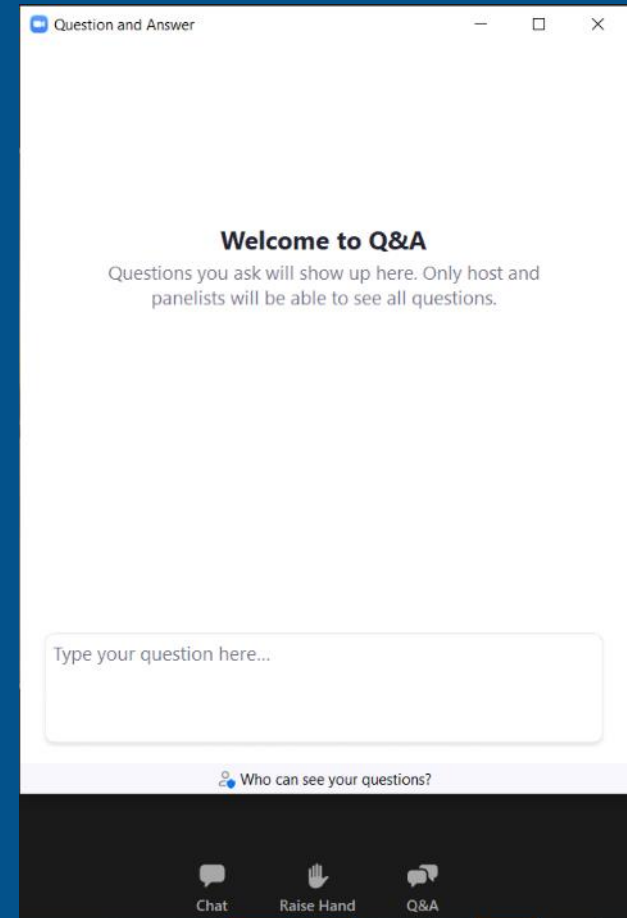
- This webinar
- Nutrient Work Group meeting June 22, 2022 (9-11 am)
 - Open to public, see DEQ website “Advisory Councils and Work Groups”
- Water Pollution Control Advisory Committee meeting June 24, 2022 (10-11 am)
 - Open to public, see DEQ website “Advisory Councils and Work Groups”

Rulemaking Timeline for Variance Rule

- 45-day public comment period starts July 8, 2022
 - Following publication of notice in MT administrative register (MAR)
- Public hearing: August 18, 2022
- Department response to comments
- Department Head signs rule no later than September 27, 2022, rule filed no later than September 27, 2022
- Publishes by October 7, 2022

Questions/ Comments

- Raise hand (*9 if on the phone) or type questions into the Q&A
- DEQ will unmute you if you wish to provide your comment orally
- If calling by phone, press*6 to unmute
- State your name and affiliation before providing your comment



Unmute



Chat



Raise Hand



Q&A

Leave

Thanks for Joining Us

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**This webinar recording will be posted at:
<https://deq.mt.gov/water/Councils>**

New Rule: Temporary Water Quality Standards Variances

- Implementing rules for 2019 legislation (75-5-320)

Department may adopt rules providing criteria and procedures for the department to issue a temporary variance to water quality standards if:

- (a) a variance will not result in a lowering of currently attained, ambient water quality;
 - (b) the department rules are consistent, as necessary, with federal rules that authorize states to adopt variances from standards, including but not limited to 40 CFR 131.14; and
 - (c) (i) a permittee cannot reasonably expect to meet a water quality standard during the permit term for which the variance is approved; and
(ii) a permit compliance schedule is not feasible to preclude the need for a variance during the permit term for which the variance is approved.
- (2) In order to receive a temporary variance, a permittee shall evaluate facility operations and infrastructure to maximize pollutant reduction through an optimization study. The variance must require the implementation of optimization study actions as terms and conditions of the discharge permit.
 - (3) The department shall review a temporary variance issued pursuant to this section at least once every 5 years and may continue, modify, or terminate the temporary variance as a result of the review.

NEW RULE I: Temporary Water Quality Standards Variances

- Section 1 and 11: Dept will issue variance rules in conformance with 40CFR131.14
- Section 2: Describes what the permittee must provide in an application to the dept
- Section 3 and 4: Describe instances where an alternative to a variance may be applicable and eliminate need for a variance
- Section 5: Describes the department's review and approval process and the requirement for an optimization study
- Section 6: Submittal requirements to EPA
- Section 7: Ties the variance standard to MPDES permit limits for that pollutant
- Section 8 and 9: Re-evaluation requirements
- Section 10: Identifies option for individual or multiple dischargers.

Municipal Preliminary Screener: Details

If the Municipal Preliminary Screener benchmark comparison is clearly less than 1.0%, and the LMI percentage rate is 'low' or 'mid-range' (see below), then it is assumed that the cost of meeting standards will not impose an undue financial burden and the analysis is done. In this case, no variance will be given and it is not necessary to continue with the Secondary Test in the next tab. If the Municipal Preliminary Screener benchmark comparison is 1% or greater, then it is necessary to continue to the secondary test in the next tab, regardless of the LMI score. If the Municipal Preliminary Screener is clearly less than 1.0% and the LMI is 'high', then one may continue the analysis and move on to the Secondary Test due to a high number of low to medium income households.

Is a secondary test necessary? _____

Municipal Preliminary Screener Benchmark Comparison:

Little Impact	Mid-Range Impact	Large Impact
Less than 1.0%	1.0% - 2.0%	Greater than 2%
Indication of no substantial economic impacts		Proceed to Secondary Tests

Low to Medium Income Percentage Rate Benchmark Comparison:

Low	Mid-Range	High
Less than 15%	15-40%	More than 40%

Calculating Average Secondary Score

	Secondary Indicators			Score	
	Indicator	Weak*	Mid-Range**		Strong***
SocioEconomic Indicators	Poverty Rate	More than 28%	2.5-28% (5 year estimates, 2012-2016)	Less than 2.5%	2
	Low to Medium Income Percentage (LMI)	More than 40%	12-40% (5 year estimates, 2012-2016)	Less than 12%	2
	Unemployment	More than 1% above State Average (>4.5%)	State Average (seasonally unadjusted)---- 3.5% (June 2018)	More than 1% below State Average (<2.5%)	2
	Median Household Income	More than 10% below State Median-- \$43,542	State Median-- \$48,380 (2016)	More than 10% above State Median-- more than \$53,218	1
	Property Tax, fees and revenues divided by MHI and indexed by population	More than 3.6	1.7 to 3.6 (FY 2017)	Less than 1.7	2
					SUM:
				AVERAGE:	1.80

* Weak is a score of 1 point

** Mid-Range is a score of 2 points

*** Strong is a score of 3 points

Substantial Impacts Matrix

Assessment of Substantial Impacts Matrix

Table 2-2

Assessment of Substantial Impacts Matrix

	Municipal Preliminary Screener		
	Less than 1%	1% to 2%	Greater than 2%
Secondary score			
Less than 1.5	Borderline	X	X
Between 1.5 and 2.5	\$	Borderline	X
Greater than 2.5	\$	\$	Borderline

Result:

X-Impacts are Substantial: Move to widespread analysis

Borderline-Impacts may be Substantial: Move to widespread analysis

\$-Impacts are not substantial and the community can pay to meet base nutrient criteria: No variance