Draft Temporary Water Quality Standards Variance Rules: Informational Webinar

June 16, 2022

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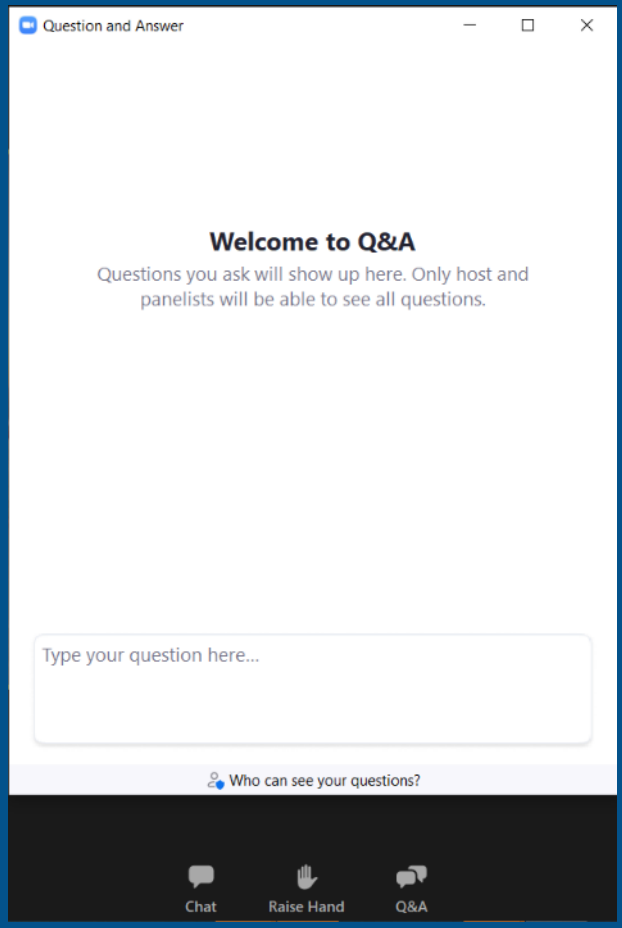
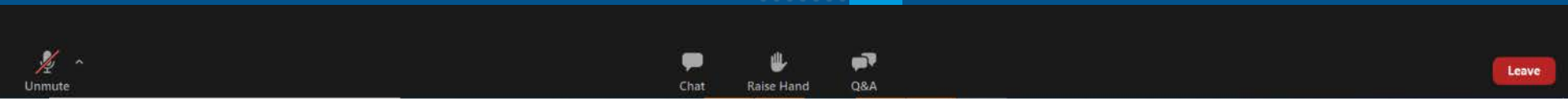
Welcome!

- 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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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




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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

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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.

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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)

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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

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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

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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.

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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).

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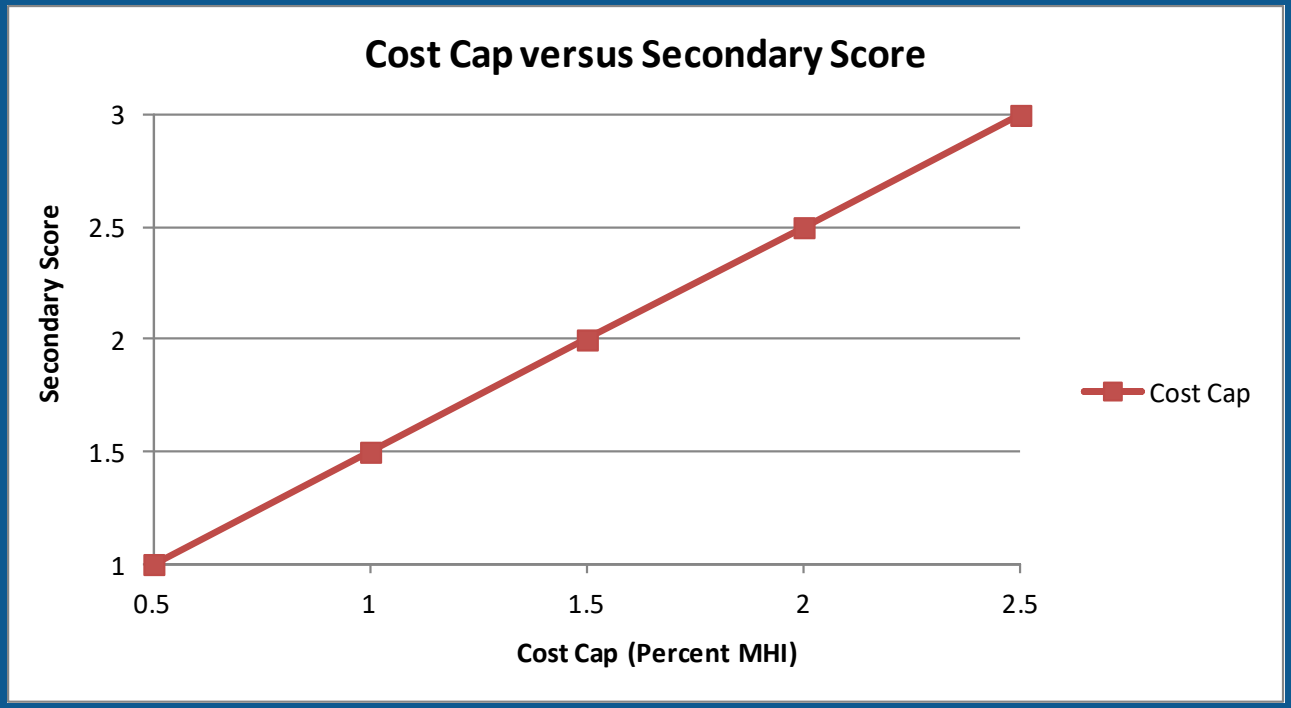
The Process Defines the Affordability Cap

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 ≥1.5% of MHI for wastewater, the community would not have to upgrade its wastewater treatment due to the water quality standard

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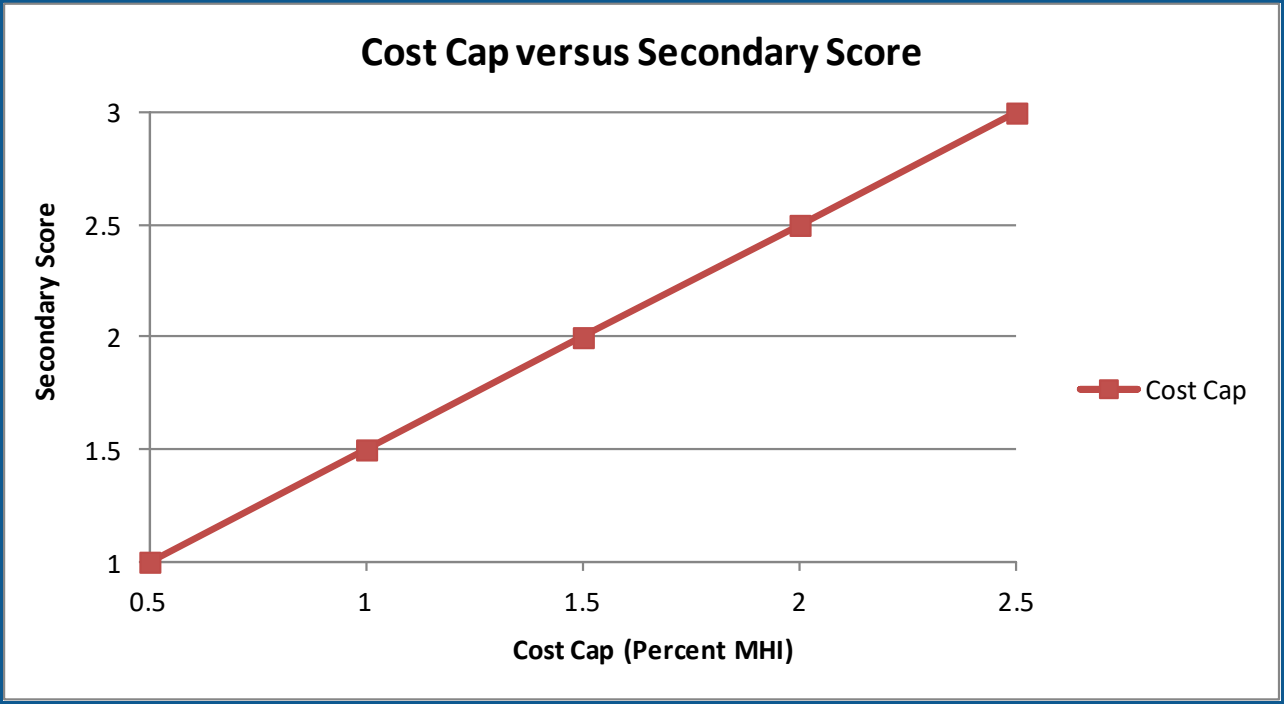
The Process Defines the Affordability Cap

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.

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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

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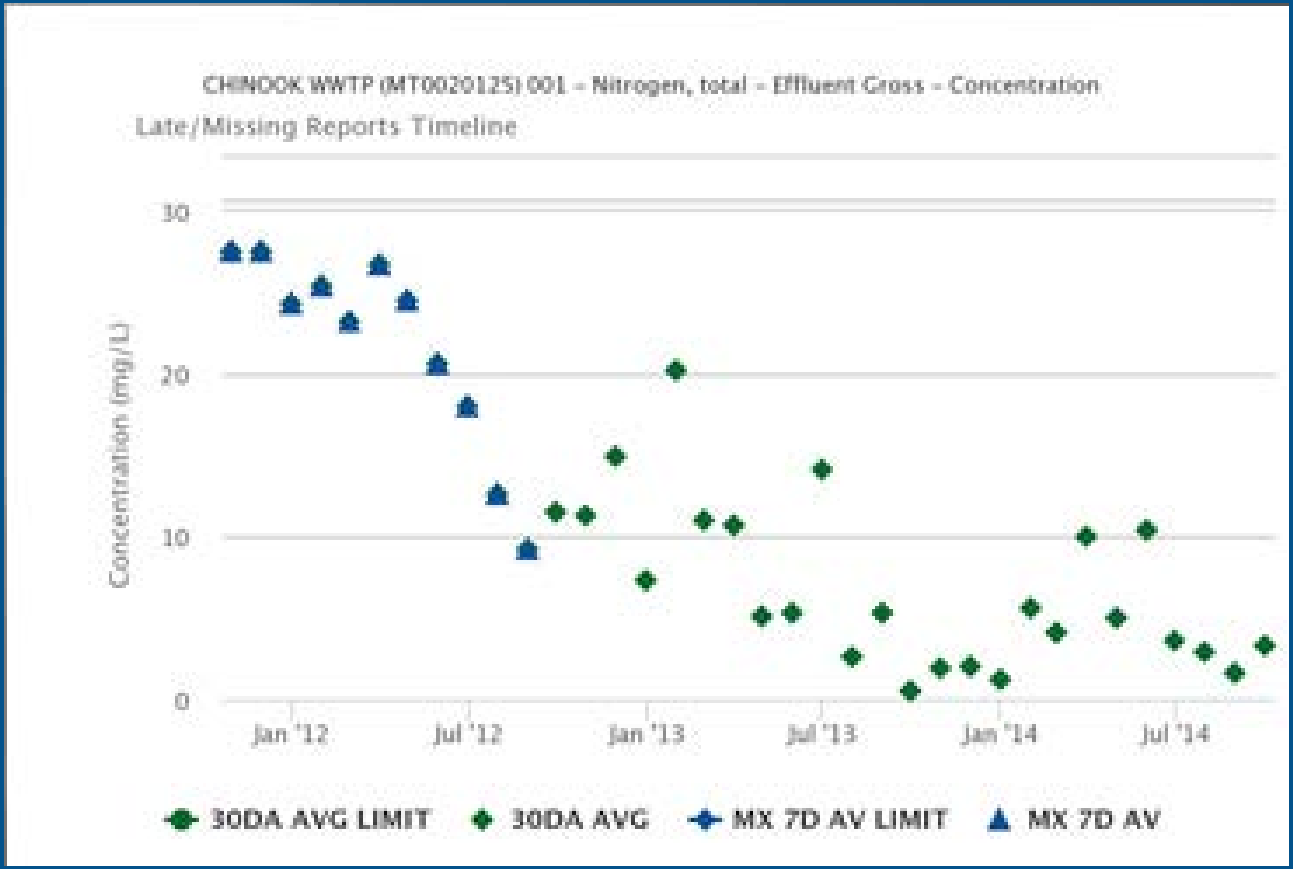
Benefits of Facility Optimization



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

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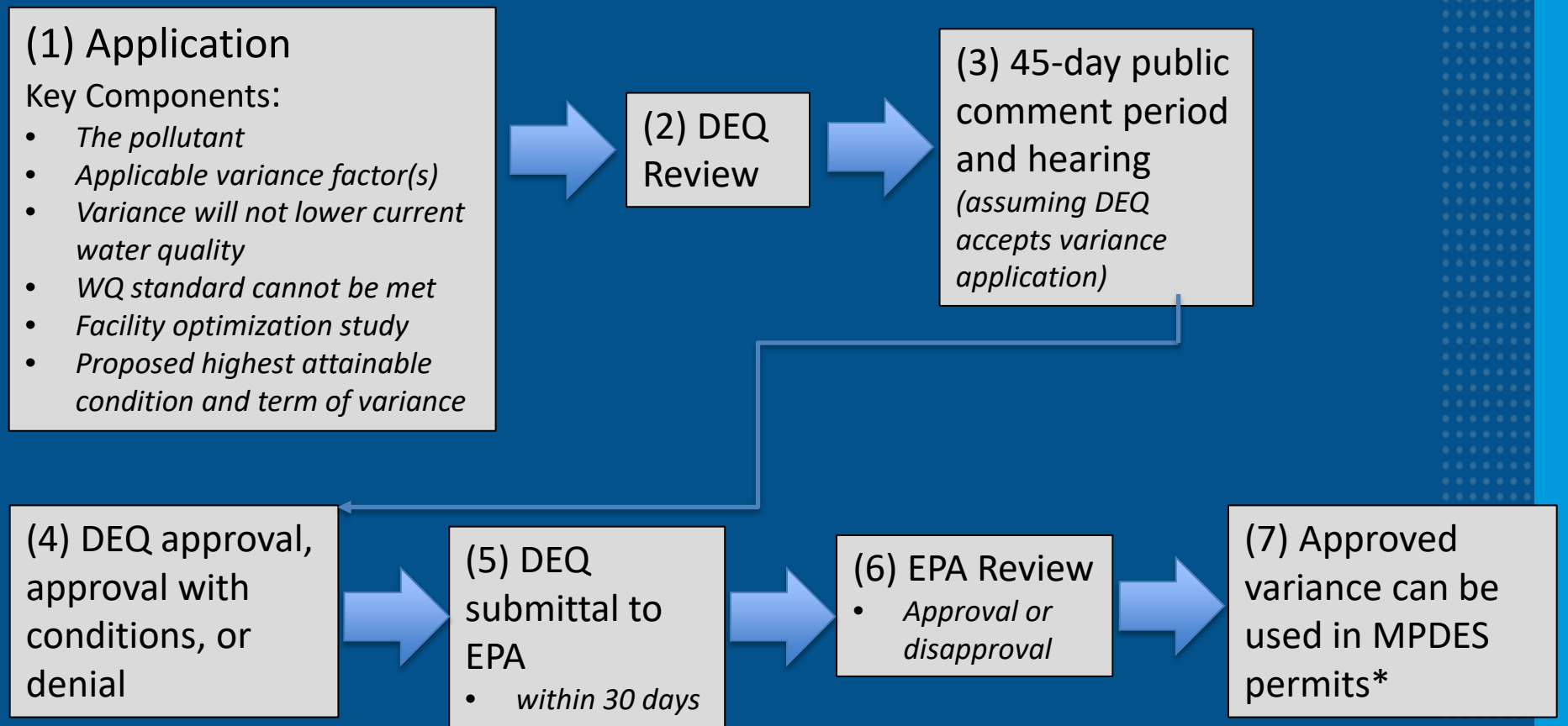
Variances Developed by DEQ

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 variances
- 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”

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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

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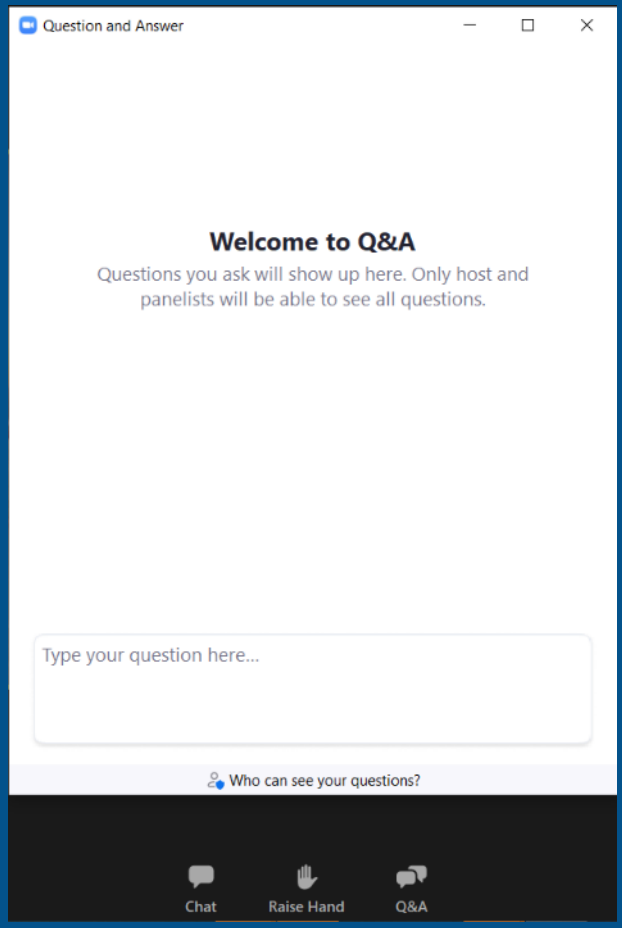
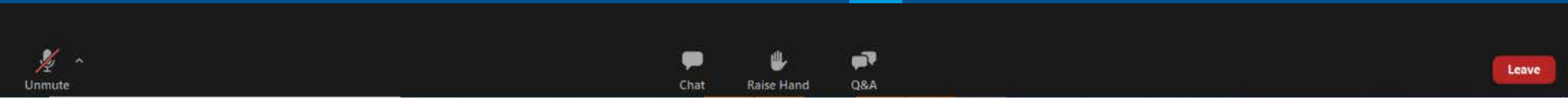
Questions/ Comments

- 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





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Thanks for Joining Us

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

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