

# Aquifer Water Quality Standards (AWQS) Rulemaking:

## Notice of Proposed Rulemaking (NPRM)

### Stakeholder Meeting

Groundwater Protection Section  
Water Quality Division  
November 20th, 2024



Clean Air, Safe Water,  
Healthy Land for Everyone



# Introductions



Randy Matas  
*Deputy Director*  
*Water Quality Division*

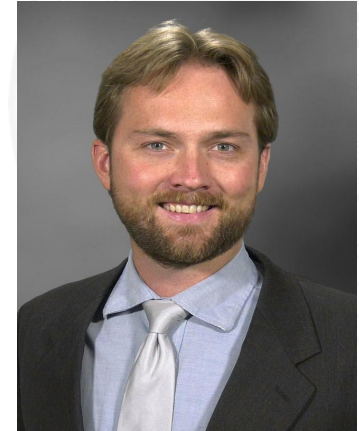
# AWQS Team Members



Rhona Mallea  
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*Water Quality*  
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Dan Reeder  
*Principal*  
*Hydrogeologist*  
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Jon Rezabek  
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- Background
- Notice of Proposed Rulemaking Highlights
- Timeline
- Next Steps
- Online Resources

# Webinar Orientation

**Muted**

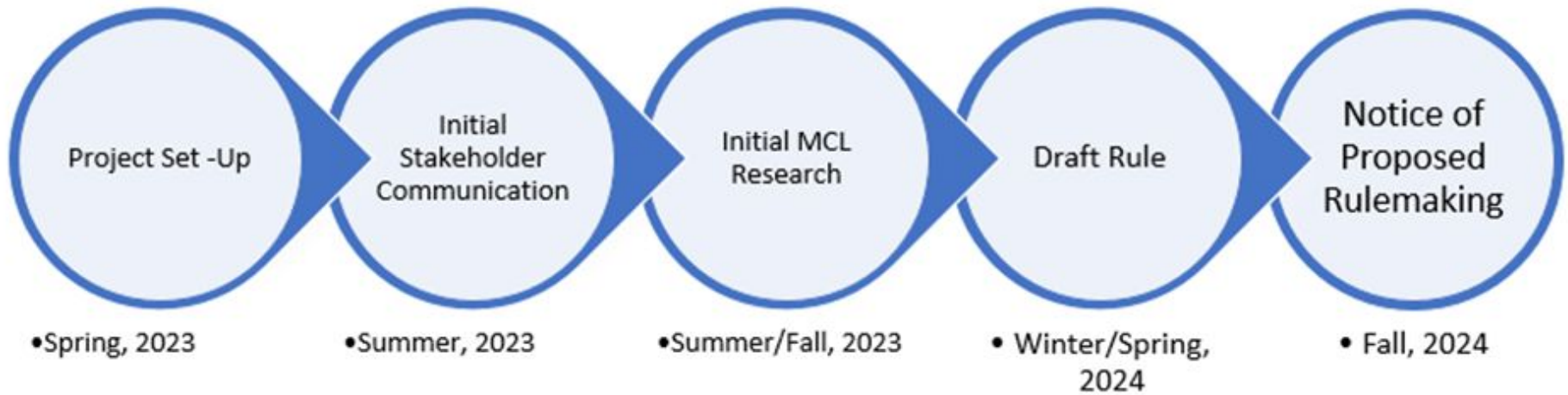
**Not  
Recording**

**Questions?**

**Answers**

The screenshot displays the GoToWebinar interface. At the top, there is a menu bar with 'File', 'View', and 'Help'. Below this is a 'Audio' panel with a 'Sound Check' indicator. The audio settings are set to 'Computer audio' (selected) and 'Phone call'. A red 'MUTED' indicator is visible next to the microphone selection. The microphone is set to 'Microphone (HD Webcam CS10)' and the speakers to 'Speakers (High Definition Aud...'. Below the audio panel is a 'Questions' section with a text input field containing '[Enter a question for staff]' and a 'Send' button. At the bottom, it displays 'Multi sessions different registrants' and 'Webinar ID: 980-960-603'. The GoToWebinar logo is at the very bottom.

## What have we done so far?



- This meeting is not a formal public hearing.
- To make a comment on the record:
  - Must be between 11/15 & 12/16
  - Must be made in one of four ways:
    - Online: SmartComment Portal (See website)
    - Via Email: [awqs@azdeq.gov](mailto:awqs@azdeq.gov)
    - Via Physical Mail (See NPRM)
    - Orally at Public Hearing on 12/16/24 (See NPRM)

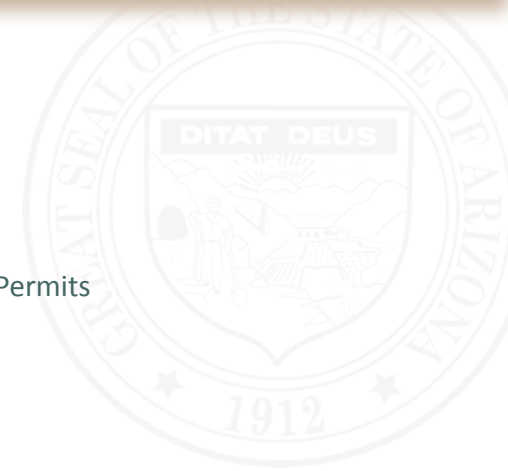
WHAT

ARE

THE

RULES?





## Who is proposing the rules?

- ADEQ

## What are the rules?

Aquifer Water Quality Standards and Implementation Rule for Individual Aquifer Protection Permits

## What do the rules consist of?

- Two Components:
  - Implementation Rule
  - AWQs

## Why are rules being made?

- ADEQ is required to open a rulemaking docket to adopt new or adjusted SDWA-MCLs
  - See A.R.S. § 49-223

## When will the rules be effective?

- Projected for Spring 2025

## Where are the rules?

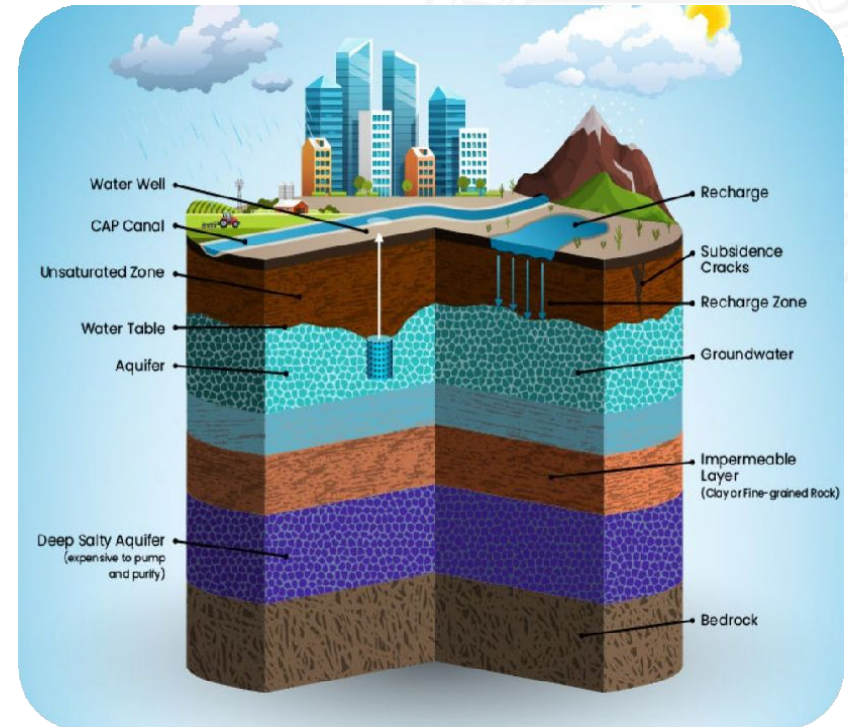
- Arizona Administrative Code:

Title 18 - Environmental Quality	Title 18 - Environmental Quality
Chapter 9 - Department of Environmental Quality	Chapter 11 - Department of Environmental Quality
Water Pollution Control	Water Quality Standards
Articles 1 & 2 - New AWP Article	Article 4 - Aquifer Water Quality Standards

## How are the rules being made?

- Through a state rulemaking process, pursuant to A.R.S. § 41-1021 *et seq.*

- Draft Rule released:
  - April 2024
- Notice of Proposed Rulemaking published on:
  - November 15th, 2024



- Implementation Rule (INDV APPs)
  - 1 NPRM
  
- Proposed AWQSs
  - 4 NPRMs
    - Arsenic,
    - Uranium
    - Microbiological Contaminants
    - Disinfection Byproducts



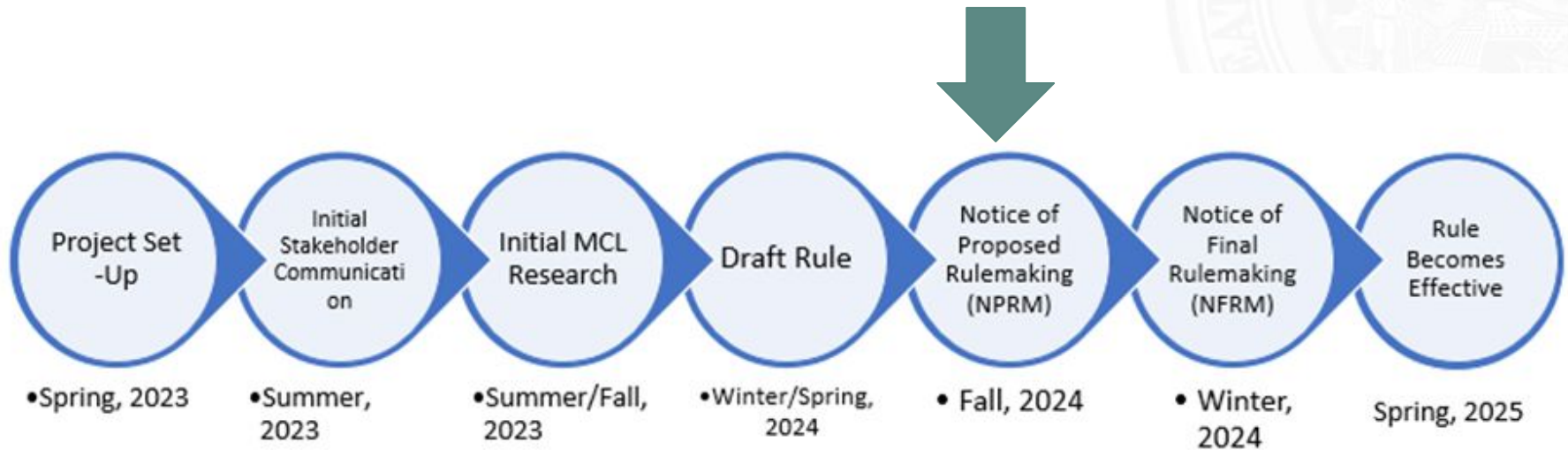
- Amendment Schedule
- Amendment Application Requirement
  - No later than 4 Years after effective date
- No monitoring if pollutant is “unlikely” to be in discharge
- Baseline Discharge &/or Groundwater Monitoring Requirement
  - Generate Report, thereafter
- ADEQ sets ALs, DLs &/or AQLs, if necessary



# Proposed AWQSs

<b>Pollutant</b>	<b>AWQS</b>	<b>MCL</b>
Arsenic	0.05 mg/L	0.01 mg/L
Bromate	None	0.01 mg/L
Chlorite	None	1 mg/L
Haloacetic Acids	None	0.06 mg/L
Microbiological Contaminants	A.A.C. R18-11- 406(F)	40 CFR 141.63(C)
Total Trihalomethanes	0.1 mg/L	0.08 mg/L
Uranium	None	30 µg/L

# AWQS Rulemaking Critical Path



- This presentation will be posted on the ADEQ webpage at:  
<https://www.azdeq.gov/rulemaking/awqs-update/resources>
  
- Notice of Proposed Rulemaking (NPRM) comment period:  
  

November 15th through December 16, 2024
  
- Comment on the Proposed Rule in one of the following four ways:
  - Online: SmartComment Portal (*See website*)
  - Via Email: [awqs@azdeq.gov](mailto:awqs@azdeq.gov)
  - Via Physical Mail (*See NPRM*)
  - Orally at Public Hearing on 12/2/24 (*See NPRM*)
  
- Aquifer Water Quality Email: [awqs@azdeq.gov](mailto:awqs@azdeq.gov)

- **Webpage**

- <https://www.azdeq.gov/awqs-update-active-rulemaking>

- **Fact Sheet**

- <https://static.azdeq.gov/wqd/rulemaking/awqs/fs.pdf>

- **Resources**

- <https://www.azdeq.gov/rulemaking/awqs-update/resources>

- **Notice of Docket Opening (NDOs)**

- <https://www.azdeq.gov/awqs-update-active-rulemaking>

- **Notice of Proposed Rulemaking (NPRMs)**

- <https://www.azdeq.gov/awqs-update-active-rulemaking>



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**Issue** - the current Statutes and Rules lack clarity on how the Agency will implement new standards, when they take effect and who they apply to. Rules allow for permits to be amended in two ways (A.A.C. R18-9-A211(A));

- 1) Director's initiative OR**
- 2) Applicant initiative**

*Regardless of who initiates the amendment to incorporate new standards, ADEQ finds Rules to be insufficient in outlining clear expectations for it's permittees to comply with when standards change.*

**Proposal** - New Rule defines what permittees can expect for implementation of the AWQSs, including:

## **1) Requirements for existing permits**

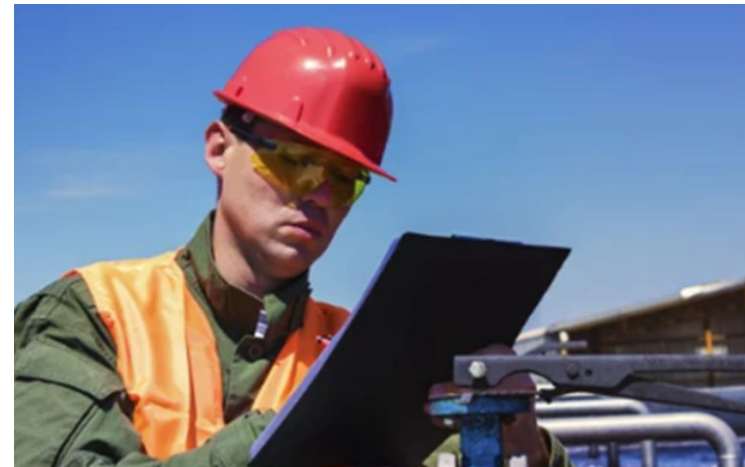
- a) Mandatory monitoring upon standards' effective date
- b) Sampling frequency, duration, and reporting frequency
- c) APP amendment schedule under the Director's Initiative
- d) Post monitoring period, demonstrated ability to comply with new or adjusted AWQS based on site specific demonstration(s)
- e) Incorporation of new or adjusted permit limits occurs upon permit amendment
- f) Compliance with new AWQS or adjusted AQL's no later than 4 years after the effective date.

## **2) Requirements for new permits**

- a) Monitoring of new standards either;
  - i) upon issuance of a new permit, or
  - ii) in accordance with other permit conditions, as applicable

Requirements of an existing or new permittee will vary based on whether a facility has required groundwater monitoring, discharge monitoring or both.

- 1) Short-term, **initiate baseline sampling and monitoring frequency for the 7 new AWQS upon the effective date** via rule requirements.
- 2) Long-term, amend sampling requirements **through permit requirements, compliance schedule items and based on baseline sampling results.**



**ADEQ plans to implement the newly established AWQSs, or adjusted AQL's or DL's as applicable, into Aquifer Protection Permits (APPs).**

**Two primary industries will be involved in the implementation of the new AWQS:**

- **Mining**

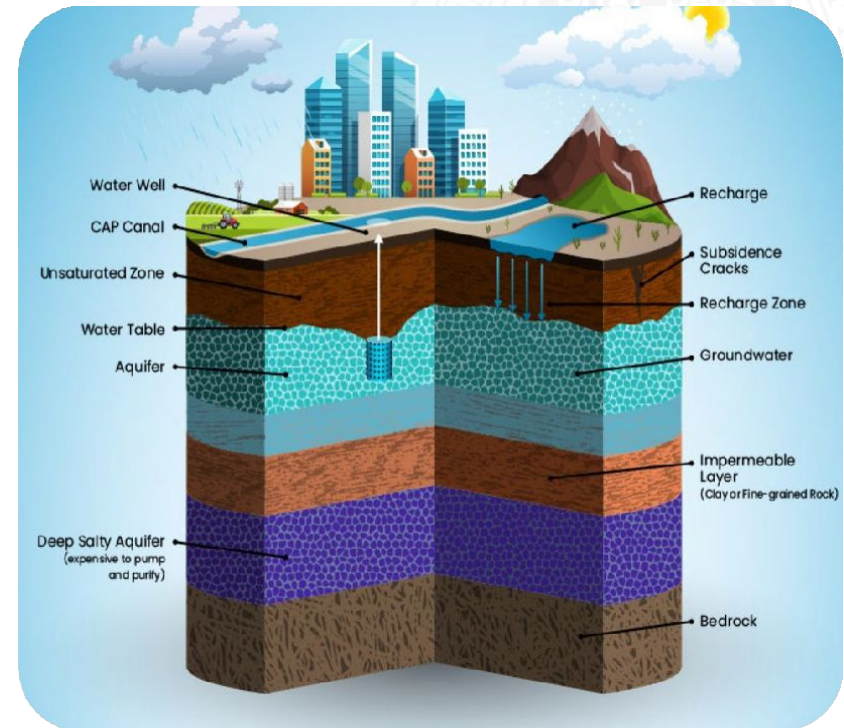
- Long-term and in most instances, the Department expects that only 2 of the 7 new AWQSs will be applicable to Mining Operations; Arsenic and Uranium.

- **Wastewater Treatment Facility (WWTF)**

- Long-term and in most instances, the Department expects that all 7 of the new AWQSs will be applicable to WWTF operations.

Regardless of industry type, ADEQ will consider historical discharge data, historical groundwater data, site conditions and geogenic vs. anthropogenic source(s) to inform the establishment of Discharge Limits (DLs) or Aquifer Quality Limits (AQLs) at or above the new AWQSs.

- What are AWQs?
  - maximum contaminant levels, established for aquifers in the state of Arizona for the protection of drinking water usage and public health.
- How are AWQs used?
  - Aquifer Protection Program
  - Remediation Programs
    - WQARF
    - VRP
  - Underground Storage Tanks



- **Protect Public Health**
  - All AZ aquifers protected for drinking water use
  - Groundwater used as a drinking water source by municipalities and private well owners
  
- **Legal Requirement**
  - A.R.S. § 49-223(A)



# Implementation Timeline



2024

- **Quarter 4:**
  - Rule Becomes Effective
  - Baseline Monitoring is Initiated
- **Phase 1: Initiate Amendments:**
  - Facilities with existing As and U data

2025

- **Quarters 1 through 4:**
  - Ongoing Baseline Monitoring

2026

- **Quarters 1 through 4:**
  - Ongoing Baseline Monitoring

2027

- **Quarters 1 through 4:**
  - **Phase 2: Amendments:**
    - High-risk facilities that have completed baseline monitoring

2028

- **Quarters 1 through 4:**
  - **Phase 3: Amendments:**
    - Medium Risk facilities that have completed baseline monitoring

2029

- **Quarters 1 through 4:**
  - **Phase 4: Amendments:**
    - Low Risk facilities that have completed baseline monitoring