



Aquifer Water Quality Standards (AWQS) Stakeholder Meeting:
AWQS Amendments: Baseline Monitoring, Amendment Schedule
Timelines (Phases), Guidance Documents and Questions

Groundwater Protection Section

Water Quality Division

July 21, 2025

1:00 PM - 2:45 PM

Introductions



Randy Matas
Deputy Director
Water Quality Division

AWQS Team Members



Rhona Mallea
Senior Project Manager
Water Quality Division



Dan Reeder
Principal Hydrogeologist
Water Quality Division



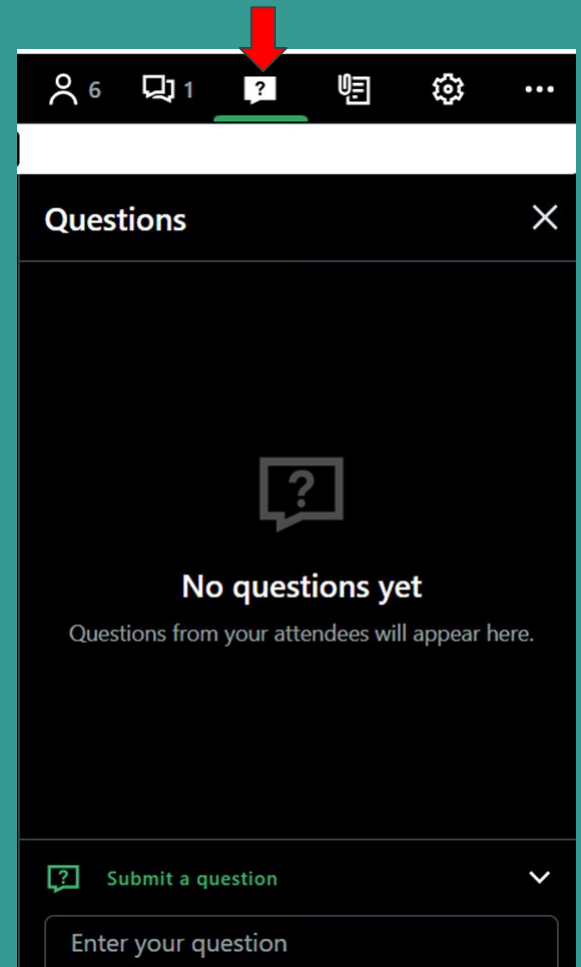
Kelly Hermanson, RG
Senior Hydrogeologist
Water Quality Division



Jon Rezabek
Legal Specialist
Rule Writer
Water Quality Division

Webinar Orientation

- Muted
- Not Recording
- Questions



Agenda

- Welcome & Introductions
- Review Agenda
- New or Adjusted AWQs
- AWQS Process Flow Chart
- APP Permit Amendment Timeline and Phases
- AWQS Document Guidance Documents
- Online Resources and Contacts
- Questions

AWQS Background

A.R.S. § 49-223

- AWQSs must be adopted through rulemaking.
- Within 1 year of new or adjusted MCL, ADEQ must open rulemaking docket adopting MCL as an AWQS.
- **"Substantial Opposition" (S.O.) may be submitted to ADEQ on the record**, explaining with reasonable specificity why an MCL is inappropriate as an AWQS.
- Despite submission of S.O. for a particular constituent, **ADEQ may adopt the MCL upon finding it appropriate as an AWQS in AZ.**
 - Must consider whether the EPA MCL assumptions about technologies, costs, sampling and analytical methodologies and public health risk reduction are appropriate for an AWQS.
- **ADEQ may adopt an alternative AWQS if the MCL is found to be inappropriate for an AWQS in AZ.**
 - Must be based on protection of human health.
 - Must rely on technical protocols appropriate for the development of an AWQS.
 - Must be based on credible medical and toxicological evidence that has been subjected to peer review.

Scope of AWQS Update Rulemaking

- 4 New Aquifer Water Quality Standards
 - Parameters:
 - **Bromate, Chlorite, Haloacetic Acids & Uranium**
- 3 Adjusted Aquifer Water Quality Standards
 - Parameters:
 - **Arsenic, Microbiological Contaminants & Total Trihalomethanes**
- 1 New or Adjusted AWQS Implementation Rule



New or Adjusted AWQSs

<u>Pollutant</u>	<u>Previous AWQS</u>	<u>New or Adjusted AWQS</u>
Arsenic	0.05 mg/L	0.010 mg/L
Bromate	No Standard	0.010 mg/L
Chlorite	No Standard	1.0 mg/L
Haloacetic Acids	No Standard	0.060 mg/L
Microbiological Contaminants	¹	²
Total Trihalomethanes	0.1 mg/L	0.080 mg/L
Uranium	No Standard	0.030 mg/L

¹ From a requirement to utilize Total Coliform as an indicator parameter in the routine & repeat compliance sampling orientation. (See R18-11-406(F) & 40 CFR 141.63)

² To a requirement of either Fecal Coliform or *E. coli* indicator parameters in the routine & repeat compliance sampling orientation.

AWQS Rulemaking

- Exemption Memos: 8/24/22 & 2/5/24
- Docket Openings: 6/28/24
- Notices of Proposed Rulemaking: 11/15/24
- Notices of Final Rulemaking: Projected For 6/27/25
- Effective Date: 8/4/25

How will the new AWQs affect my Individual APP permit?

- The implementation rule requires most individual APP permittees to take action of some kind. The extent of which is detailed in the implementation rule.
 - Implementation Rule: A.A.C. R18-9-A215.

New or Adjusted Aquifer Water Quality Standards



Process Flow Chart



Implementation Rule: R18-9-A215(C) – **Baseline Monitoring**

“Persons with issued individual permits as of a new or adjusted AWQS effective date shall begin Baseline Monitoring, pursuant to subsection (E) below, for a new or adjusted AWQS within three months...”

- Unless
 - The permit has no ongoing monitoring requirements,
 - The permittee has not begun ongoing monitoring,
 - The permittee has submitted an Alternative Baseline Monitoring Request
 - The permittee has submitted an Unlikely to be Present in the Discharge Demonstration

*** Effective Date: 8/4/25**

*** Begin Baseline Monitoring by 11/4/25**

Implementation Rule: R18-9-A215(D) – Alternative Baseline Monitoring Commencement, Timeframe, Duration and/or Frequency

“Permittees subject to Baseline Monitoring may submit a request to conduct Baseline Monitoring under an alternative timeframe, monitoring duration and/or sampling frequency within three months of a new or adjusted AWQS effective date with reasonable cause for the request included therein.”

- Fill out and submit Alternative Baseline Monitoring Meeting Form.



Implementation Rule: R18-9-A215(H) – Unlikely to be Present in Discharge Demonstration

“A pollutant with a new or adjusted AWQS shall be removed from the scope of Baseline Monitoring upon a demonstration that the pollutant is not likely to be present in a facility’s discharge.”

“The Department may require a permittee to begin Baseline Monitoring for a pollutant with a new or adjusted AWQS after review of the demonstration if the Department has a reasonable basis to believe the pollutant is, or is likely to be, present in the facility’s discharge.”

Demonstrations may include, but are not limited to:

- A characterization of the facility’s discharge in relation to the pollutant with a new or adjusted AWQS;
- Past monitoring and sampling data at the facility and the facility’s site; or
- Process or other information demonstrating that the pollutant is not used or generated at the site or is otherwise not likely to be present in discharges at the site.”



Implementation Rule: R18-9-A215(E) – Baseline Monitoring Requirements

- Begin Baseline Monitoring for new or adjusted AWQs w/n 3 months of effective date in rule (between August 4th and November 4th, 2025).
 - Permits w/only Discharge Monitoring
 - 1 year, 12 monthly samples, @permitted monitoring location
 - Permits w/only Groundwater Monitoring
 - 2 years, 8 quarterly samples, @permitted monitoring location
 - Permits w/both Discharge & Groundwater Monitoring
 - Permits w/o Discharge or Groundwater Monitoring
 - Approx. 30 permits
 - Meet w/DEQ
 - Potential discharge characterization
 - Can utilize prior collected samples / monitoring in accordance w/A215(E)(3)



Implementation Rule: R18-9-A215(E)(4) – Baseline Monitoring Analytical Methods

“Sampling for each pollutant with a new or adjusted AWQS shall be conducted using Arizona Department of Health Services-approved (ADHS) methods under A.A.C. R9-14-610, including methods on the ADHS Director Approved List, if available. If an ADHS-approved method does not exist, sampling shall be conducted using an appropriate EPA-approved method or a method specified by the ADEQ Director.”

Table 1. Contingency Analytical Methods for Baseline Monitoring specified by the ADEQ Director

Analyte	Analytical Method
Arsenic	EPA 200.8, SM 3113B, SM 3114B
Bromate	EPA 300.1, EPA 317.0 Rev 2.0, EPA 321.8, EPA 326.0, EPA 557
Chlorite	EPA 300.0, EPA 300.1, EPA 317.0 Rev 2.0, EPA 326.0
Haloacetic Acids	EPA 552.1, EPA 552.2, EPA 552.3, EPA 557, SM 6251B,
Fecal coliform	SM 9223B
<i>E. coli</i>	SM 9223B
Total Trihalomethanes	EPA 502.2, EPA 524.2, EPA 551.1, SM 6251B
Uranium	EPA 200.8

Implementation Rule: R18-9-A215(F) and (G) – Baseline Monitoring Report, Department Review and Potential Permit Amendment

- At the conclusion of Baseline Monitoring, compile/develop the Baseline Monitoring Report.
- After the Baseline Monitoring Report is completed, submit an application for permit amendment to reflect the new or adjusted AWQs in the permit.
 - Submit during the time range specified in the Permit Amendment Schedule (a.k.a. - the Phase).
- Department reviews, processes and determines whether new Alert Levels, Discharge Limits or Aquifer Quality Limits are necessary for the new or adjusted AWQs for the permitted facility(s).

Adjusted AWQS: R18-11-406(F) – Baseline Monitoring for Microbiological Contaminants

“The aquifer water quality standard for microbiological contaminants is based upon the detection or non-detection of either Fecal Coliform or E.coli in a 100-milliliter sample, depending on the requirement in the permit.”

- Routine & Repeat Sampling
- Total Coliform was the previous indicator parameter for Microbiological Contaminants.
- For the purposes of conducting Baseline Monitoring for the updated Microbiological Contaminants AWQS, monitoring for either or both indicator parameters (Fecal Coliform or *E.coli*) is sufficient.

Implementation Rule: R18-9-A215(A) – Permit Amendment Schedule

“Upon the effective date of a new or adjusted AWQS, the Director shall develop a schedule to amend issued individual permits to reflect the new or adjusted AWQS pursuant to R18-9-A211.”

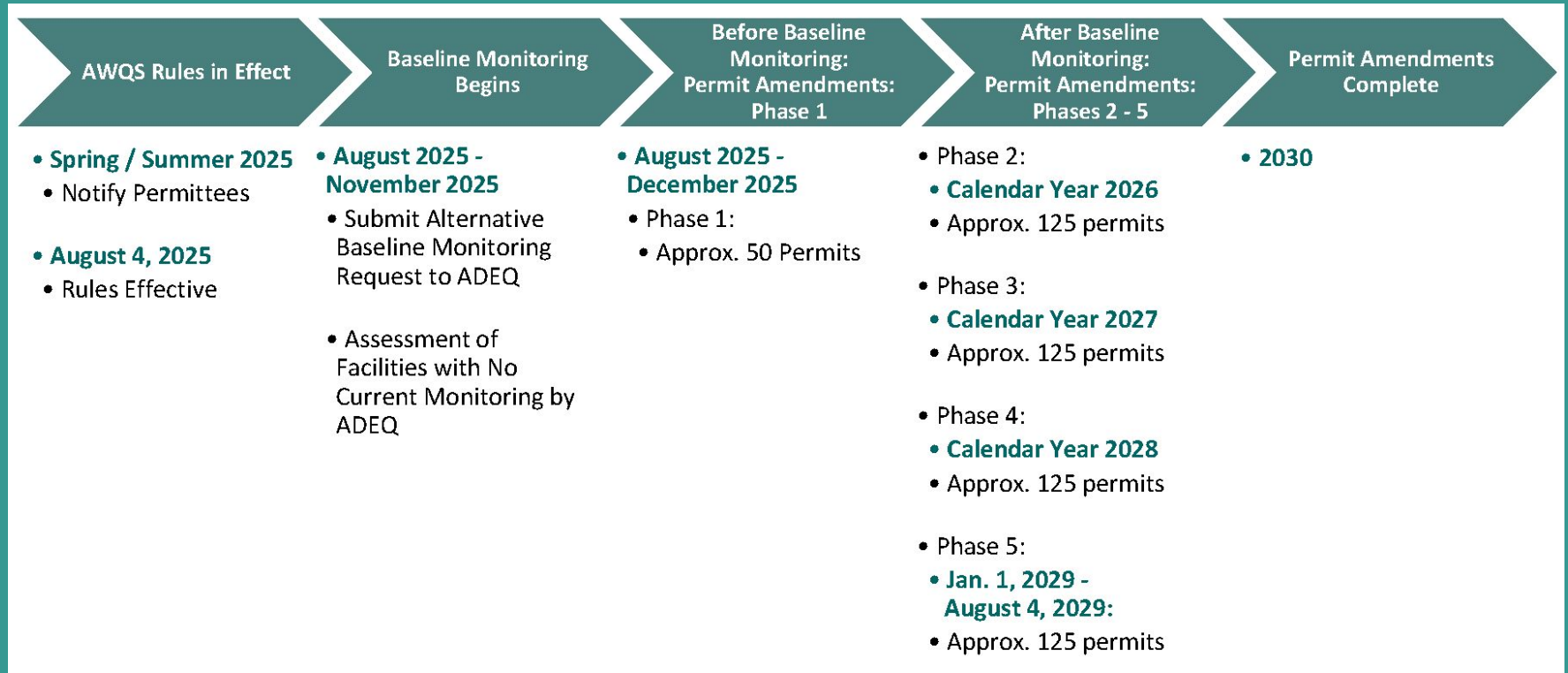
- A.A.C. R18-9-A211. Permit Amendments

“The Director may amend an individual permit based upon a request or upon the Director’s initiative.”



Individual APP Permit Amendment Schedule

Approx. ~500 Permits



Phase Assignment

Approx. ~500 Permits



- **Phase 1** - August 4th through December 31st, 2025:
 - No Discharge or Groundwater Monitoring req. in permit
- **Phase 2** - January 1st through December 31st, 2026:
 - Only Discharge Monitoring req.
- **Phase 3** - January 1st through December 31st, 2027:
 - Only Discharge Monitoring req.
- **Phase 4** - January 1st through December 31st, 2028:
 - Only Groundwater Monitoring or Groundwater & Discharge Monitoring req.
- **Phase 5** - January 1st through August 4th, 2029:
 - Only Groundwater Monitoring or Groundwater & Discharge Monitoring req.

* Standard Baseline Monitoring timeframes: Discharge - 1 Year; Groundwater - 2 Years

* Standard Baseline Monitoring Commencement per implementation rule: Between August 4th & November 4th, 2025

Amendment Phases Location



— ACTIVE RULEMAKING

Resources | Aquifer Water Quality Standards Update

Revised On: Jun. 25th, 2025 - 01:40 pm

[Aquifer Water Quality Standards \(AWQS\) Update Rulemaking Page | View >](#)

- [Fact Sheet | View >](#)

Draft Rule

- [Draft AWQS Rule | View >](#)
- [Draft AWQS Implementation Plan | View >](#)

Contact Us



— NEW OR ADJUSTED

AWQS Permit Amendment Submission Schedule

- [Phase 1 >](#)
- [Phase 2 >](#)
- [Phase 3 >](#)
- [Phase 4 >](#)
- [Phase 5 >](#)

AWQS Document Guidance Documents

- Alternative Baseline Monitoring Guidance Document
- Unlikely to be Present in Discharge Demonstration Guidance Document
- New or Adjusted AWQS Monitoring Guidance Document

*Once these documents are finalized, they will be posted to the AWQS website:

Update myDEQ: mySETTINGS_myCOMPANY
details



Pre-Application Meeting

- ADEQ recommends all applicable permittees schedule a Pre-Application meeting to discuss the scheduled amendment as soon as possible. Please fill out and submit a Pre-Application form at this [webpage](#).
 - Especially those permits in Phase 1
 - No ongoing monitoring requirements in permit
 - Facility may be required to reasonably characterize its discharge in relation to the seven (7) parameters with new or adjusted AWQs within a reasonable amount of time.
 - The reason for a potential characterization requirement would be to reevaluate the facility under the new or adjusted AWQs.
 - Phase 1 Amendment Submission Range:
 - August 4th through December 31st, 2025:



Resources:

- Active Rulemaking Website:
 - <https://www.azdeq.gov/awqs-update-active-rulemaking>
- AWQS Frequently Asked Questions (FAQ's)
 - <https://www.azdeq.gov/rulemaking/awqs-update/resources>
- AWQS Rulemaking Resources Webpage:
 - <https://www.azdeq.gov/rulemaking/awqs-update/resources>



Today's Presentation to be posted here

- AWQS@AZDEQ.GOV



ADEQ Contacts:

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 - (602) 771-4492
- Jon Rezabek, AWQS Rule Writer
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 - (602) 771-8219



Questions?



Permit Amendment Phase Notification

- 6/4/25 - ADEQ sends a general Notice email to Individual APP community
- 6/9/25 - ADEQ sends specific email Notices w/Phase assignments therein
- Week of Monday, 6/9/25 - ADEQ sends physical mailers to all addresses associated w/Individual APP permittees w/Phase assignments therein
 - Note: LTF #s put on address stickers on outside of envelope
- June 2025 - ADEQ to post initial Phase assignments on website