

NOTICE OF FINAL RULEMAKING

TITLE 18. ENVIRONMENTAL QUALITY

CHAPTER 9. DEPARTMENT OF ENVIRONMENTAL QUALITY – WATER POLLUTION CONTROL

ARTICLE 11. REMEDIATION OF NONPOINT SOURCE POLLUTION FROM ABANDONED MINES

PREAMBLE

- 1. Permission to proceed with this final rulemaking was granted under A.R.S. § 41-1039 by the governor on:**

Initial approval was granted on July 1, 2025 and final approval was granted on August 17, 2026.

- | 2. Article, Part, or Section Affected (as applicable) | Rulemaking Action |
|--|--------------------------|
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Article 11	New Section
R18-9-1101	New Section
R18-9-1102	New Section
R18-9-1103	New Section
R18-9-1104	New Section
R18-9-1105	New Section
R18-9-1106	New Section
R18-9-1107	New Section

- 3. Citations to the agency's statutory rulemaking authority to include the authorizing statute (general) and the implementing statute (specific):**

Authorizing statute: A.R.S. §§ 49-104(B)(4), 49-202(A), 49-203(A)(1)

Implementing statute: A.R.S. §§ 49-221, 49-203(A)(4)

- 4. The effective date of the rule:**

This rule shall become effective 60 days after a certified original and preamble are filed in the Office of the Secretary of State pursuant to A.R.S. § 41-1032(A). The effective date is (to be filled in by *Register* editor).

- a. If the agency selected a date earlier than the 60-day effective date as specified in A.R.S. § 41-1032(A), include the earlier date and state the reason the agency selected the earlier effective date as provided in A.R.S. § 41-1032(A)(1) through (5):**

Fill in after filing

- b. If the agency selected a date later than the 60-day effective date as specified in A.R.S. § 41-1032(A), include the later date and state the reason the agency selected the later effective date as provided in A.R.S. § 41-1032(B):**

Fill in after filing

5. Citations to all related notices published in the *Register* as specified in R1-1-409(A) that pertain to the current record of the final rule:

Notice of Rulemaking Docket Opening: 31 A.A.R. 3065, Issue Date: September 26, 2025, Issue Number: 39 File Number: R25-221

Notice of Proposed Rulemaking: 32 A.A.R. 671, Issue Date: March 20, 2026, Issue Number: 12 File Number: R26-30

6. The agency's contact person who can answer questions about the rulemaking:

Name: Jonathan Quinsey
Title: Legal Specialist
Division: Water Quality
Address: 1110 W. Washington St. Phoenix, AZ 85007
Telephone: (602) 771-8193
Email: quinsey.jonathan@azdeq.gov
Website: <https://azdeq.gov/rulemaking/aml>

7. An agency's justification and reason why a rule should be made, amended, repealed or renumbered, to include an explanation about the rulemaking:

A. Background and Purpose of this Rulemaking

This rulemaking establishes a new Article 11 in Title 18, Chapter 9 of the Arizona Administrative Code (A.A.C.) to codify the Arizona Department of Environmental Quality's (ADEQ) process for investigating and remediating nonpoint source (NPS) pollution from abandoned mines that impact or threaten Arizona's surface waters. The rulemaking is being executed to fulfill a twofold purpose. First, it implements a formal program in response to the recommendations from the Arizona Auditor General's September 2021 performance audit of ADEQ's water quality programs (Auditor General's Report). The Auditor General found that ADEQ "has not reduced the total number of impaired surface waters in the State" despite a statutory duty to remediate impaired waters. Second, it assists ADEQ in meeting responsibilities under Arizona Revised Statutes (A.R.S.) § 49-203(A)(4), which requires ADEQ to establish a state NPS pollution control program by rule. ADEQ notes that it previously adopted an NPS pollution control rule for livestock grazing at A.A.C. R18-9-501 in 2001. This Notice of Final Rulemaking (NFRM) establishes the framework for a distinct category of NPS pollution, abandoned mines, that was not addressed under that prior rule.

Many of the impairments cited in the Auditor General's Report are caused by diffuse pollution sources rather than discrete discharges. At both the federal and state level, NPS pollution remains the leading cause of surface water

quality impairment. The United States Environmental Protection Agency's (US EPA) National Water Quality Inventory reports, which compile water quality assessment data submitted by states under Clean Water Act (CWA) §§ 305(b) and 303(d), consistently identify NPS pollution as the leading cause of surface water impairments nationwide. These issues are not new. In 1996, the US EPA published a policy document titled Nonpoint Source Pollution: The Nation's Largest Water Quality Problem (EPA 841-F-96-004).

Arizona's 2024 Integrated CWA Assessment illustrates that while *E. coli* is the most common single-parameter impairment, metals, when combined, represent the largest overall cause of impairment in Arizona. In Arizona's draft 2026 CWA Assessment, metals pollution remained the primary impairment parameter contributing to 303(d) listings. Other sources of NPS pollution include agricultural activities and stormwater runoff from areas with naturally occurring mineralization. Abandoned mine lands (AML), especially historic mines, are one type of NPS pollution that can contribute metals and sediment pollution to streams, rivers, and lakes through acid mine drainage, runoff of tailings, and other diffuse pathways. United States Geological Survey databases show there are more than 44,000 documented points with abandoned mine sites in Arizona and field verification could confirm many more.

AMLs predate modern environmental regulations. Many AMLs lack a financially viable responsible party and are on public lands or held by small private owners with no intent to resume mining. Consequently, these sites historically have not been addressable through existing programs, leaving a substantial gap in water quality protection. Recognizing this gap, ADEQ has been utilizing federal grant funds under CWA § 319 to implement voluntary remediation projects at high-priority AML sites. However, prior to this rulemaking, there was no codified state framework guiding these remediation efforts.

This final rule assists ADEQ in meeting responsibilities under A.R.S. § 49-203(A)(4) and the CWA. Under CWA § 319, states must develop management programs to control NPS pollution. By establishing clear rules and procedures for addressing AML-related NPS pollution, ADEQ aims to reduce pollutants entering Waters of the United States (WOTUS) from abandoned mines, thereby improving water quality and helping to delist impaired waters over time.

B. Overview of the Final Rules

R18-9-1101 – Definitions

Section R18-9-1101 defines terms used throughout Article 11. In response to public comments, definitions were revised. The final rule adds new defined terms including "Contaminated Environmental Media," "Person," "Pollution," and

“Waters of the State.” Unused definitions like “Best Management Practices,” “Director,” and “Institutional Control” were removed. The former “Remediating Person” definition was replaced by the broader defined term “Person.” The definition of “Abandoned Mine” now cross-references A.R.S. § 27-301 directly. The definition of “Remediation” was expanded to include isolation or containment of contaminated environmental media or mine features. The definition of “Owner” was revised to explicitly include Tribal Nations that hold a beneficial interest in land held in trust by the United States.

R18-9-1102 – Applicability

Section R18-9-1102 defines the rules’ scope and applicability. This Article is narrowly tailored to address NPS pollution from abandoned mines that affect or pose a threat to surface waters in Arizona. Remediation under Article 11 is not mandatory - these regulations apply solely when ADEQ or a person elects to use state and/or federal funds administered by the Department to address NPS pollution from an AML. The rules exclude other types of NPS pollution, point source-only discharges, sites subject to active state or federal permits, sites managed under A.R.S. Title 49 programs, and sites subject to the mined land reclamation program under A.R.S. Title 27, Chapter 5, Article 1. An overarching provision in subsection (C) requires all activities conducted under this Article to comply with all applicable laws and rules.

R18-9-1103 – Site Assessments

Section R18-9-1103 establishes the framework for a site assessment before any remediation planning begins. In response to public comments, a new Subsection (B) requires the Department or a person to prepare a Site Assessment Work Plan before beginning field activities. The Work Plan describes the assessment activities, sampling types, mapping, objectives, timeline, and a Health and Safety Plan. The site assessment itself, which may be conducted in one or more phases, characterizes the nature and extent of NPS pollution, current and potential impacts to public health and the environment, physical site characteristics, and current and foreseeable impacts to WOTUS. Using the data collected, evaluated, and vetted through the Department, a site-specific risk evaluation may be conducted.

R18-9-1104 – Remediation Plans

Section R18-9-1104 establishes a framework for developing a Remediation Plan for each AML site following the site assessment. Unless otherwise pre-approved by the Department, the Department or a person shall prepare a Remediation Plan before engaging in remediation. The plan shall include but is not limited to a description of the remediation and its objectives, how the objectives will be achieved and measured, a timeline, estimated cost(s), expected operational life, and a Health and Safety Plan.

R18-9-1105 – Remediation

Section R18-9-1105 covers the implementation phase of remediation. Remediation must protect public health and the environment and, to the extent practicable, further the goal of restoring and maintaining the chemical, physical, and biological integrity of WOTUS and WOTUS protected surface waters. When selecting the type of remediation, the Department or a person may consider factors including population and welfare concerns, routes of exposure, impacts to the waterbody and to aquatic and terrestrial biota, the amount and fate of pollutants, technical practicality and cost-effectiveness, groundwater impacts, and the availability of other remediation mechanisms. The type of remediation is selected based upon best engineering, geological, or hydrogeological judgment.

R18-9-1106 – Remediation Completion

Section R18-9-1106 implements an evaluation mechanism after remediation is complete. The Department or a person shall prepare a remediation completion report that includes a description of the remediation and how it met project objectives, final cost(s), final technical drawings and maps, operating and maintenance requirements, and a description of post-remediation monitoring activities. When a report is prepared by a person other than the Department, only the Department has authority to determine whether remedial objectives have been met, based on criteria such as reductions in pollutant loading, reductions in pollutant mobility, positive effects on aquatic and terrestrial biota, and whether the waterbody is meeting applicable surface water quality standards. The Department or a person may also take additional action at a site where remediation has previously been performed under this Article upon discovery of new information, inaccurate or incomplete prior submissions, failure to achieve remedial objectives, or the need to respond to a release or threat of a release.

R18-9-1107 – Access to Abandoned Mines

Section R18-9-1107 requires that, prior to initiating activities under this article, the Department or a person shall ensure that all necessary and legally valid access rights have been obtained. This provision was broadened in response to public comment to capture the full range of legal instruments beyond simple access agreements that may be required to establish lawful access, particularly where surface and mineral rights may be bifurcated.

C. Conclusion

This final Article 11 provides a simple but effective framework for addressing one of Arizona's most persistent water quality challenges - pollutant runoff from abandoned mines. It takes a voluntary, non-regulatory approach to a regulatory problem, using incentives and state-led action rather than new mandates on private parties. By codifying the processes ADEQ has successfully piloted in real world projects, the rules provide clarity and consistency for how Ar-

izona will reduce metal pollutant loads in impaired waters. Each section serves the overarching goal of restoring water quality in rivers and streams impacted by historic mining, thereby protecting public health, enabling safe recreation, preserving aquatic life, and ultimately working toward delisting waters from Arizona's impaired waters list in accordance with state and federal water quality standards.

8. A reference to any study relevant to the rule that the agency reviewed and either relied on or did not rely on in its evaluation of or justification for the rule, where the public may obtain or review each study, all data underlying each study, and any analysis of each study and other supporting material:

ADEQ did not rely on any studies to justify this rulemaking. The Department did use a broad base of state assessments and reports to provide context for the rule's impact. Key references include Arizona's 2024 and draft 2026 Integrated 305(b) Assessment and 303(d) Listing Report (Integrated Report), which provided data on surface water impairments, and the Arizona Auditor General Performance Audit Report 21-116 (Auditor General's Report), which identified deficiencies in addressing impaired waters. ADEQ also considered case studies from its own AML remediation pilot projects as proof of concept for the rules. The Integrated Report is available via ADEQ's Surface Water Monitoring & Assessment program website. The Auditor General's report is available on the Arizona Auditor General's website. Additionally, while not relied upon to establish statutory necessity, ADEQ referenced a 2026 study produced by Audubon Arizona in the EIS to evaluate the broader economic benefits of surface water protection, which found that water-based outdoor recreation along Arizona's waterways supports over 72,000 jobs and generates \$11.7 billion in annual economic output.

9. A showing of good cause why the rulemaking is necessary to promote a statewide interest if the rulemaking will diminish a previous grant of authority of a political subdivision of this state:

Not applicable

10. A summary of the economic, small business, and consumer impact:

ADEQ has produced a full economic, small business, and consumer impact statement (EIS) that addresses each of the elements required for an EIS under A.R.S. § 41-1055, which is available on the website for this rulemaking at <https://azdeq.gov/rulemaking/aml>. The following section summarizes the findings in that document.

A. Identification of the Proposed Rulemaking

The rulemaking codifies ADEQ's existing process for remediating nonpoint source (NPS) pollution from abandoned mines that impact or threaten Arizona's surface waters, assisting ADEQ in complying with A.R.S. § 49-203(A)(4). The

rules apply only to the Department or persons who voluntarily utilize CWA Section 319 grant funding or other ADEQ-administered funds for AML remediation. Because the rules formalize procedures ADEQ already follows, the rulemaking is not expected to change the frequency of remediation activities, which will continue to be driven by annual grant awards, available state funds, and site prioritization.

B. Cost-Benefit Analysis

The rule change is expected to result in minimal to positive economic impact, with no new direct costs imposed on ADEQ, political subdivisions, businesses, or landowners. It does not create new fees or regulatory compliance costs, as it codifies existing practices funded through established federal and state sources.

1. Impact on Public Entities

ADEQ: Costs are considered negligible, as the agency will implement the rules using existing staff, resources, and CWA Section 319 grant funds, with no new hires or payroll changes. Benefits include clearer regulatory authority, standardized procedures, improved alignment with A.R.S. § 49-203(A)(4), and a stronger ability to demonstrate satisfactory progress for federal grant determinations.

Other State Agencies and Political Subdivisions: No new mandates, reporting requirements, or funding obligations are imposed on local, municipal, county, or tribal governments. These entities may benefit indirectly from more predictable remediation workflows and a stronger NPS program framework that supports local planning and public health protection.

2. Impact on Private Landowners and Businesses

Costs: There are no new regulatory fees, compliance obligations, or changes to contracting procedures. Participation remains voluntary, and project-related property access is negotiated case by case, so no new direct costs are anticipated for businesses or landowners.

Benefits: Environmental consulting firms benefit from a clearer program framework supporting continued project opportunities. Landowners and nearby communities may benefit from improved onsite and downstream water quality, reduced actual or perceived environmental liability, and clearer expectations around access and site restoration.

3. Impact on Tourism and Consumers

Costs: The rule is not expected to affect consumer prices, product availability, or access to recreational services.

Benefits: By supporting continued efforts to protect surface water quality, the rules help sustain the recreation and tourism activity tied to Arizona's waters. A 2026 study led by Audubon Arizona found that water-based outdoor recreation on and along Arizona's rivers, lakes, and streams generates approximately \$11.7 billion in annual economic output, adds more than \$6.9 billion to state GDP, and supports more than 72,000 jobs.

4. Impact on Small Businesses

Small businesses are defined under A.R.S. § 41-1001 as independently owned firms not dominant in their field with fewer than 100 full-time employees or less than \$4 million in gross annual receipts.

Existing Small Businesses: No additional administrative or compliance costs are incurred. The rules apply only to firms, primarily environmental consulting firms, that voluntarily contract with ADEQ under existing procurement processes, and those firms are already familiar with the procedures being codified.

Small Business Relief: Relief methods under A.R.S. § 41-1035 are not necessary because the rules impose no new regulatory requirements, fees, or compliance obligations on small businesses.

Future Applicants: Any future firm performing AML remediation work would be subject to the same established procedures, with no additional licensing, reporting, or operational standards beyond normal contractual terms.

5. Impact on Public and Private Employment

The rulemaking is not expected to have a measurable impact on public or private employment.

Public Sector: ADEQ will implement the rules using existing staff and resources, with no new positions or changes in responsibilities anticipated.

Private Sector: Environmental consulting firms are expected to see a continuation of status-quo work levels driven by available CWA Section 319 funding and site prioritization rather than by the rule itself. Any long-term increase in consulting employment would depend on future funding growth or program expansion beyond this rulemaking.

6. Impact on State Revenues

The proposed rulemaking is not expected to have a direct impact on state revenues. It does not create new fees, licenses, permits, or penalties, and existing fee schedules and tax requirements remain unchanged. The AML remediation program will continue to be funded primarily through federal CWA Section 319 grants and appropriate state funds.

C. Analysis of Alternative Methods

ADEQ evaluated the proposed rulemaking against three alternatives - no rulemaking (status-quo), broad NPS regulation across multiple sectors, and AML rules with a new fee-based funding mechanism. ADEQ determined the proposed rulemaking to be the least costly and least intrusive method to achieve its statutory objectives without imposing new costs or regulatory burdens

11. A description of any changes between the proposed rulemaking, to include supplemental notices, and the final rulemaking:

ADEQ received public comments from three commenters during the 42-day comment period (March 20, 2026 – May 1, 2026). Based on those comments, the following changes were made from the proposed rule to the final rule:

Preamble

1. Section 6.A, Paragraph 1: Revised to acknowledge the existing NPS pollution control rule at A.A.C. R18-9-501 and to emphasize the Auditor General's recommendation to reduce impaired waters as a primary driver of this rulemaking.

2. Section 6.A, Paragraph 3: Revised to remove the assertion that the 2024 Integrated CWA Assessment confirms that metals from nonpoint sources are the chief cause of surface water quality issues statewide. The paragraph now accurately states that *E. coli* is the most common single-parameter impairment and that metals, when combined, represent the largest overall cause of impairment. The paragraph now also clarifies that AMLs are one, not the exclusive, source of metal impairments in Arizona.

R18-9-1101 (Definitions)

1. "Abandoned Mine": Revised to cross-reference A.R.S. § 27-301(1) directly rather than reproducing the statutory language.
2. "Best Management Practices": Removed; the term is not used in the Article.
3. "Clean Water Act": Removed; the term is not used in the Article.
4. "Contaminated Environmental Media": Added as a new defined term.
5. "Director": Removed; the term is not used in the Article.
6. "Discharge": Removed the phrase "or hazardous substance" as redundant (pollutant already includes hazardous substances).
7. "Hazardous": Revised to "hazardous substance" and added reference to A.R.S. § 49-201 directly rather than reproducing the statutory language.
8. "Institutional Control": Removed; the term is not used in the Article.
9. "Nonpoint Source": Revised to reference A.R.S. § 49-201 directly rather than reproducing the statutory language.
10. "Nonpoint source pollution": Removed to provide more consistency within the rule language.
11. "Owner": Revised to explicitly include Tribal Nations holding a beneficial interest in land held in trust by the United States.
12. "Person": Added as a new defined term, replacing "Remediating Person" and applying to those engaged in remediating an abandoned mine.
13. "Point Source": Revised to reference A.R.S. § 49-201 directly rather than reproducing the statutory language.
14. "Pollutant": Revised to reference A.R.S. § 49-201 directly rather than reproducing the statutory language.
15. "Pollution": Added as a new standalone defined term to reference A.R.S. § 49-201 directly rather than reproducing the statutory language.
16. "Protected surface waters": Added to reference A.R.S. § 49-201 directly rather than reproducing the statutory language.
17. "Remedial Action": Removed and consolidated into the revised definition of "Remediation."
18. "Remediation": Revised to include "isolation or containment" of contaminated environmental media or mine features and to state that remediation is conducted to "prevent or reduce" the addition of pollutants into surface waters.
19. "Remediating Person": Removed and replaced with the new defined term "Person."
20. "Site": Retained in response to comments.
21. "Waters of the State": Added as a new standalone defined term cross-referencing A.R.S. § 49-201.
22. "WOTUS" revised to reference A.R.S. § 49-201 directly rather than reproducing the statutory language.

23. “WOTUS Protected Surface Water”: Revised to reference A.R.S. § 49-201 directly rather than reproducing the statutory language.

R18-9-1102 (Applicability)

- 1.Subsection (A): Former subsections (A)(1) and (A)(2) were combined into a single Subsection (A).
- 2.Subsection (B)(1): Revised to replace “those mentioned in subsection (A)” with the defined term “abandoned mines.”
- 3.Subsection (B)(2): Revised to provide clarity and use defined terms.
- 4.Subsection (B)(3): Revised pursuant to public comment.
- 5.Subsection (C): Expanded this overarching provision to require that all remediation and associated activities under Article 11 to comply with all applicable laws and rules. A provision similar to this was previously located at R18-9-1105 and was relocated to apply to all phases of a project.

R18-9-1103 (Site Assessments)

1. Subsection (A): Made clarifying changes to make sure cross-referenced rules were correct.
2. New Subsection (B): Added to require the Department or a person to prepare a Site Assessment Work Plan prior to conducting the site assessment, describing the contents.
3. Subsection (C): Made clarifying changes.
- 4.Subsection (D): Revised to require that data be “collected, evaluated, and vetted through the Department” before a site-specific risk evaluation may be conducted.
- 5.All references to “remedial work” removed; the term “remediation” is used consistently throughout.

R18-9-1104 (Remediation Plans)

- 1.Title: Revised from “Remedial Action Plans” to “Remediation Plans” to align with the refined purpose of the Article.
- 2.Subsection (A): Added “Unless otherwise pre-approved by the Department” to accommodate emergency response and other exigent circumstances.
- 3.Subsection (B): Revised to “shall include, but is not limited to the following” to allow for site-specific requirements.
- 4.Subsection (B)(1): Revised to require the plan include “a description of the remediation, including its objectives.”

R18-9-1105 (Remediation)

- 1.Title: Revised from “Remedial Actions” to “Remediation” to align with the refined purpose of the Article.
- 2.Subsection (A)(1): Revised from requiring remediation to “assure” protection to requiring it to “Protect public health and the environment.”

- 3.Subsection (A)(2): Revised to replace “allow for the restoration and maintenance of” with “further the goal of restoring and maintaining” the integrity of WOTUS and WOTUS protected surface waters.
- 4.Former Subsection (C) (compliance requirement): Removed from this section and relocated to R18-9-1102(C) as an overarching provision applicable to all phases.
- 5.Former Subsection (E) (access agreements): Removed as duplicative.

R18-9-1106 (Remediation Completion)

- 1.Title: Revised from “Remedial Action Completion” to “Remediation Completion” to align with the refined purpose of the Article.
- 2.Subsection (A): Revised to require the Department or a person to prepare a remediation completion report after project completion.
- 3.Subsection (B) (New language): Added to specify the minimum required contents of the remediation completion report.
- 4.Subsection (C): Revised to clarify that only the Department has authority to determine whether remedial objectives have been met (removed “or a person” from the determination provision).
- 5.Subsection (D): Revised to replace “previous site” with “action at a site where remediation has previously been performed under this Article” for clarity.

R18-9-1107 (Access to Abandoned Mines)

- 1.Title: Revised from “Access” to “Access to Abandoned Mines” to align with the table of contents.
- 2.Subsection (A): Revised to broaden the access requirement from a specific reference to “access agreements” to require that “all necessary and legally valid access rights have been obtained,” reflecting the range of legal instruments potentially required in practice.

The modifications identified between the NPRM and the NFRM govern the exact same voluntary class of participants, address the same environmental remediation issues, and impose no new legal, economic, or compliance burdens. This new Article 11 does not create a compulsory regulatory program, establish a permitting regime, or assess any fee. This rulemaking codifies an already existing, purely voluntary grant-funded program which ADEQ utilizes federal Clean Water Act (CWA) § 319 funds to remediate abandoned mines. The revisions made between the NPRM and NFRM rearrange the proposed text to include clarity, eliminate redundancy, and ensure that the goal of codifying this already existing program is met at the request of stakeholders who largely already work with ADEQ on implementing this program.

Specifically, the addition of R18-9-1103(B) outlines the elements of a Site Assessment Work Plan which was a procedural clarification developed at the request of a stakeholder. The provision introduces no new regulatory obligations, liabilities, or costs. In current practice, environmental contractors and grant recipients are already required to prepare scopes of work, sampling and analysis plans, and health and safety plans as standard contractual deliverables under existing state procurement contracts or CWA § 319 grant administration guidelines. Importantly - ADEQ crafted this section of the rule permissively, and the rule states that a work plan “may include,” but is not limited to the items in the rule. Because R18-9-1103(B) simply memorializes standard, pre-existing administrative grant practices that already exist, its inclusion does not alter the fundamental effect or scope of the rule.

12. An agency’s summary of the public or stakeholder comments made about the rulemaking and the agency response to the comments:

On March 20, 2026, ADEQ announced the 42-Day public comment period for the Notice of Proposed Rulemaking (NPRM). The public comment period opened on March 20, 2026, and closed on May 1, 2026. ADEQ received comments from three entities during the public comment period.

ADEQ has responded to each comment in this Response to Comments (RTC) Summary.

The following is a list of the public comments received, followed by ADEQ’s response in **bold text**.

BERNARDO VELASCO - SAN CARLOS APACHE TRIBE [04/30/2026]

ORAL COMMENT #1: For the purposes of entities like tribes, that have a beneficial interest but the fee title interest remains at the federal government, we’d like to see a more inclusive definition of “owner” that would include those kinds of property rights.

RESPONSE #1: ADEQ appreciates this comment and agrees that the definition of “Owner” should be clarified. Accordingly, ADEQ has modified the definition of “Owner” to explicitly include tribal nations that have a beneficial interest but the federal government maintains fee title interest.

ARIZONA MINING ASSOCIATION [05/01/2026]

COMMENT #1: Preamble. Item 6.A, paragraph 1: ADEQ states in this paragraph that “[u]ntil now, Arizona has lacked rules that directly formalize such a [nonpoint source pollution control] program.” However, ADEQ currently has rules that it adopted in 2001 addressing nonpoint source pollution from livestock grazing (see A.A.C. R18-9-501). ADEQ’s statement should be clarified to recognize the existing nonpoint source pollution control rule in A.A.C. R18-9-501.

RESPONSE #1: ADEQ appreciates this comment. Paragraph 1 of the Preamble's Section 6.A has been revised to say that these rules "assist ADEQ in meeting its responsibilities under ARS 49- 203(A)(4)" rather than stating ADEQ did not have an NPS program prior to this rulemaking. The paragraph has also been revised to put more emphasis on ADEQ conducting this rulemaking as a response to the Auditor General's recommendation to decrease the amount of impaired waters.

COMMENT #2: Preamble. Item 6.A, paragraph 3: AMA questions the accuracy of the statements in this paragraph that appear to be derived from interpretations of data presented in Arizona's 2024 Clean Water Assessment. ADEQ states that the 2024 Clean Water Assessment "confirmed that metals from nonpoint sources are a chief cause of surface water quality issues statewide." A review of the 2024 Clean Water Assessment report reveals that the report does not directly support this statement. There is nothing in the report stating or confirming that metals from nonpoint sources are a chief cause of surface water quality issues statewide. Rather, this appears to be an assumption made by ADEQ and the statement should be removed or clarified.

ADEQ also states that the draft 2026 Clean Water Assessment suggested that "metals pollution remained the primary impairment parameter contributing" to impaired water listings in Arizona and that there were "approximately 260 miles of streams in Arizona impaired by pollutants potentially associated with abandoned mines." While these statements may be supported to some extent by the data, the lead-in sentence to this paragraph attempts to tie these statements solely to impacts from abandoned hardrock mines. Given that many of ADEQ's discovered metal impairments are likely related to other nonpoint sources of pollution including agricultural activities or stormwater runoff from the many locations in Arizona that have naturally occurring mineralization exposed on the ground surface, such insinuations are overbroad, inappropriate, and should be removed from the final rule preamble.

RESPONSE #2: Paragraph 3 of the Preamble's Section 6.A has been revised to remove ADEQ's assumption that the 2024 Assessment confirms metals (via AMLs) are the primary cause of surface water pollution throughout the state. Instead, the paragraph calls out that while E.coli is the top single parameter impairment, when combined, metals represent the largest overall cause of impairment. This is supported by the data used to create the bar graph on page 6 of Chapter 2 in the 2024 Assessment. The paragraph has further been revised to make clear that AMLs are not the only source of metal impairment.

COMMENT #3: Proposed R18-9-1101 (definition of "abandoned mine"): The intent of the proposed rule seems to be focused on remediation of abandoned hardrock mines (see preamble language as well as proposed R18-9-1102 (applicability)). Consequently, the definition of "abandoned mine" should track that intent. ADEQ also should consider

adding a definition of “hardrock mine.” If the agency wants to add such a definition, the AMA would be happy to work with ADEQ to develop appropriate language for such a definition.

Given the focus on “site” throughout the proposed rule, as well as the definition of “site” in proposed R18-9-1101, the definition of “abandoned mine” should incorporate such term.

The phrase “for a deserted mine site” should be removed. It is not clear what that means.

RESPONSE #3: The definition of “abandoned mine” in this rule has been updated to incorporate the Arizona State Mine Inspector’s existing definition found in A.R.S. § 27-301 rather than developing a new definition. ADEQ has not added a definition for “hardrock mine” in these rules and refocused the rule language to focus on “abandoned mines” more generally to ensure that ADEQ can remediate pollution that’s impacting surface waters. ADEQ retains the “site” definition in this NFRM as well.

Regarding the AMA’s comment on the phrase “deserted mine site,” ADEQ revised the rule to reference the Arizona State Mine Inspector’s existing definition found in A.R.S. § 27-301, rather than repeat the statutory language. This approach maintains consistency within existing Arizona law and avoids creating a separate definition in this rule.

COMMENT #4: Proposed R18-9-1101 (definition of “best management practices”): The phrase “best management practices” is not used in the remainder of the proposed rule and should be removed to avoid confusion.

RESPONSE #4: The definition of “best management practices” has been removed from R18-9-1101.

COMMENT #5: Proposed R18-9-1101 (definition of “director”): The word “director” is not used in the remainder of the proposed rule and should be removed.

RESPONSE #5: The definition of “director” has been removed from R18-9-1101.

COMMENT #6: Proposed R18-9-1101 (definition of “discharge”): The phrase “or hazardous substance” should be deleted because the term “pollutant” already includes hazardous substances.

RESPONSE #6: The phrase “or hazardous substance” has been removed from the definition of “discharge” in R18-9-1101.

COMMENT #7: Proposed R18-9-1101 (definition of “institutional control”): The phrase “institutional control” is not used

in the remainder of the proposed rule and should be removed to avoid confusion.

RESPONSE #7: The definition of “institutional control” has been removed from R18-9-1101.

COMMENT #8: Proposed R18-9-1101 (definition of “remediation”): This definition is too narrow as proposed. For example, capping is not the “treatment or removal of contaminated environmental media.” And it is not clear that a tailings pile or an adit is “contaminated environmental media.”

RESPONSE #8: The definition has been revised to include “isolation or containment” of environmental media, including mine features. This definition was also combined with the definition of remedial action to clarify that remediation is being conducted to reduce the addition of pollutants into surface waters.

COMMENT #9: Proposed R18-9-1101 (definition of “remedial action”): This definition is too narrow as proposed because it may not be possible or practicable in every remediation scenario of an abandoned mine to “prevent” the addition of a pollutant to WOTUS. Also, ADEQ should consider whether it would be simpler to just use one term (“remediation” or “remedial action”) in the proposed rule rather than both.

RESPONSE #9: The definition “remedial action” has been removed from R18-9-1101 and combined with the definition of “remediation”. The “remediation” definition includes the language “prevent or reduce” in order to address the concern raised by the commenter.

COMMENT #10: Proposed R18-9-1101 (definition of “remediating person”): “Abandoned mine lands” is not a defined term. The AMA recommends using the defined term of “abandoned mine.”

RESPONSE #10: The definition of “remediating person” has been removed from R18-9-1101 and replaced with the definition of “person”. The definition of “person” includes all of the same entities/persons as the definition of “remediating person” and also clarifies that it applies to those engaged in remediating an abandoned mine.

COMMENT #11: Proposed R18-9-1102(A)(1): This item ((A)(1)) should be removed. The proposed language would seem to extend the program to persons conducting remediation who do not accept federal or state funds for the remediation. This is contrary to ADEQ’s stated intent in the preamble (“These regulations apply solely when ADEQ or a remediating person elects to use state or federal funds to address pollution caused by AML” (emphasis in original)). (A)(2) by itself effectuates ADEQ’s intent.

RESPONSE #11: To provide greater clarity, the applicability requirements of subsections (A)(1) and (A)(2) have been combined into new Section (A). See response to AMA’s Comment #12 for additional rationale.

COMMENT #12: Proposed R18-9-1102(A)(2): Language added to reflect that there may be projects that address both point and nonpoint sources, and to ensure that such projects are addressed under the rule when they qualify for state or federal funds. Also, the defined term of “abandoned mine” should be used in place of the undefined “abandoned hardrock mine” term especially if the changes requested above to the definition of “abandoned mine” being limited to “hardrock” mines is made.

RESPONSE #12: To maintain consistency with the applicability requirements in R18-9-1102(A), ADEQ retained the distinction between point and nonpoint sources. Additionally, R18-9-1102(A) has been revised to use the defined term “abandoned mine” throughout the rule.

COMMENT #13: Proposed R18-9-1102(B)(1): Proposed changes necessary to clarify application or nonapplication of proposed rule.

RESPONSE #13: R18-9-1102(B)(1) has been revised to replace “those mentioned in subsection (A)” to “abandoned mines” so that it is consistent with the removal of R18-9-1102(A)(1) (Applicability).

COMMENT #14: Proposed R18-9-1102(B)(2): Proposed changes are necessary to be consistent with requested revisions to proposed R18-9-1102(A)(2).

RESPONSE #14: R18-9-1102(B)(2) has been revised to state that the rules do not apply to discharges “solely” from point sources “with no nonpoint source contribution” so that it is consistent with the changes made to R18-9-1102(A).

COMMENT #15: Proposed R18-9-1102(B)(3): ADEQ mentions in the preamble that sites subject to mine reclamation requirements would be ineligible, so the suggested revisions would reflect that intent.

RESPONSE #15: R18-9-1102(B)(3) has been revised to include, “...or the mined land reclamation program established pursuant to A.R.S. Title 27, Chapter 5, Article 1”.

COMMENT #16: Proposed R18-9-1103(A): ADEQ’s language introduces a third variant (i.e., “remedial work”) to the terms “remediation” and “remedial action.” The AMA’s suggested revision avoids that confusion.

RESPONSE #16: The new Article 11 has been revised to remove any mention of “remedial work”. For consistency, the new Article 11 will only use “remediation”, which is defined in R18-9-1101.

COMMENT #17: Proposed R18-9-1103(A)(1): The AMA suggests adding identification of potential sources, in addition to extent and nature, of pollution as part of a site assessment consistent with proposed R18-9-1103(B)(3).

RESPONSE #17: No change has been made to the rule as a result of this comment. If it is relevant to a site, the requested source identification process would be included in the requirement under R18-9-1103(A)(1).

COMMENT #18: Proposed R18-9-1104(B)(1): Because proposed R18-9-1104(B)(2) requires a description of how the remedial action will achieve the remedial objectives, proposed R18-9-1104(B)(1) should be revised to specify that the description of a remedial action plan includes the objectives of the remedial action.

RESPONSE #18: R18-9-1104(B)(1) has been revised to require the remediation plan include “a description of the remediation, including its objectives”.

COMMENT #19: Proposed R18-9-1105(A)(1): “Assure” is too strong of a word in the context of remediation of nonpoint source pollution associated with abandoned hardrock mines and could result in certain remediations, including those conducted by ADEQ, being denied funding under the proposed rule.

RESPONSE #19: R18-9-1105(A)(1) has been revised to “Protect public health and the environment; and”.

COMMENT #20: Proposed R18-9-1105(A)(2): Like the comment on proposed R18-9-1105(A)(1), ADEQ’s proposed language is too limiting and should be revised as suggested by the AMA.

RESPONSE #20: R18-9-1105(A)(2) has been revised to replace, “allow for the restoration and maintenance of..” with “further the goal of restoring and maintaining...”.

COMMENT #21: Proposed R18-9-1105(E): Considering proposed R18-9-1107, this subsection is not necessary and should be removed.

RESPONSE #21: R18-9-1105(E) has been removed. R18-9-1107 already addresses the requirement that any person conducting this type of remediation must have legal access to the property if they are not the property owner. The removed language was duplicative.

COMMENT #22: Proposed R18-9-1106(B): The AMA suggests that changes be made to clarify the scope of this subsection. The reference to a “previous site” is potentially confusing.

Further, ADEQ should clarify in the proposed rule or preamble that the agency cannot order a third party to take further action under this purely voluntary program under R18-9-1106(B). This subsection simply outlines when additional state-lead or voluntary third-party remedial actions may be conducted at a site where remedial action work has previously been performed under the proposed abandoned mine rule.

RESPONSE #22: For clarity, R18-9-1106(D) has been revised to replace “previous site” with “action at a site where remediation has previously been performed under this article...”. The rule as proposed is already clear that ADEQ cannot order a third party to take further action, as demonstrated by the use of “may take” in Subsection D. No change has been made to the rule as a result of this comment

COMMENT #23: Proposed R18-9-1106(B)(4): As noted above, the definition of “pollutant” includes hazardous substances. Also, the agency’s ability to determine that additional remedial action is necessary to respond to a release or the threat of a release of a pollutant should be limited to situations that present a significant adverse risk to public health or the environment.

RESPONSE #23: ADEQ appreciates this comment, however, no change has been made to the rule as a result of this comment. There may be instances where a release of a pollutant may necessitate action on the part of the Department or a person that does not present a significant risk to the public health or the environment. Adding this language would be overly restrictive.

COMMENT #24: Proposed R18-9-1107: To be consistent with the table of contents for the proposed rule, the AMA suggests adding “abandoned mine” in the title and text of this section.

RESPONSE #24: The title of R18-9-1107 has been revised to “Access to Abandoned Mines” and the rule language has been revised to clarify that prior to initiating a site assessment or remediation at an abandoned mine, a valid access agreement must be in place.

TETRA TECH [05/01/2026]

AAC R18-9-1101

COMMENT #1: Under the definition of “Abandoned Mine”, suggest the term “deserted” is removed, as it is nonstandard in mining regulations and does not appear elsewhere in the A.A.C. in the context of mining regulation (e.g. Title 27-Mining; Title 11-State Mine Inspector). In addition, the “or” should be changed to “and” in this definition to match the preamble definition, where it states “where operations have ceased and there is no ongoing responsible party or permit.”

RESPONSE #1: ADEQ appreciates this comment. The definition of “abandoned mine” has been updated in R18-9-1101 to incorporate the Arizona State Mine Inspector’s existing definition found in ARS 27-301.

COMMENT #2: “Best Management Practices” is defined here then never used again in the proposed Rule.

RESPONSE #2: The definition of “best management practices” has been removed from R18-9-1101.

COMMENT #3: “Director” is defined here then never used again in the proposed Rule.

RESPONSE #3: The definition of “director” has been removed from R18-9-1101.

COMMENT #4: “Discharge” is defined here then never used again in the proposed Rule. If this definition is to remain, should it not also include groundwater since groundwater is addressed in R18-9-1105(B)(7).

RESPONSE #4: ADEQ is retaining the definition of “discharge” because it appears in R18-9-1102(B). In addition, pursuant to A.R.S. 49-203(A)(4), ADEQ is only authorized to control nonpoint source discharges of pollutants into WOTUS. In response to a comment from the AMA, the phrase “or hazardous substance” has been removed from the definition of “discharge” in R18-9-1101.

COMMENT #5: “Institutional Control” is defined here then never used again in the proposed Rule.

RESPONSE #5: The definition of “institutional control” has been removed from R18-9-1101.

COMMENT #6: The use of the term “Nonpoint Source Pollution” immediately following the definition of “Nonpoint Source” is unnecessarily restrictive. It is suggested that ADEQ instead provide a standalone definition of “Pollution” and apply it consistently across applicable definitions and sections of the rule, to improve clarity and flexibility.

RESPONSE #6: The definition of “Nonpoint Source Pollution” has been removed from R18-9-1101 and a definition for “Pollution” has been added.

COMMENT #7: Since the definition of “Remediation” includes the term “contaminated environmental media,” a corresponding definition for this term would be helpful. Additionally, clarification regarding the intended endpoint of remediation might be beneficial here. Specifically, it would be beneficial to clarify what criteria the “contaminated environmental media” must meet to be considered remediated (e.g. state standards, risk-based levels, laboratory nondetect concentrations, etc.)?

RESPONSE #7: The definition of “remediation” has been revised to include “isolation or containment” of contaminated environmental media, including mine features. This definition was also combined with the definition of remedial action so that it states that remediation is being conducted to prevent or reduce the addition of pollutants into surface waters.

A definition for “contaminated environmental media” has been added to R18-9-1101.

R18-9-1106(C) explains the various criteria by which a site is evaluated to determine if remediation is complete, so no additional criteria are necessary. It is important to note, the goal of projects completed under the nonpoint source program is to reduce the amount of nonpoint source pollution entering WOTUS or a WOTUS protected surface water. Given the diffuse and complicated nature of nonpoint source pollution, it may take several years and numerous projects within a watershed to achieve compliance with surface water quality standards and delisting of a waterbody from EPA's 303(d) list of impaired waters.

COMMENT #8: Suggest revising the definition of "Remediation" to include the term "containment," in addition to the existing terms "treatment" and "removal," to ensure the full range of commonly implemented remedial actions are captured.

RESPONSE #8: The definition has been revised to include "isolation or containment" of contaminated environmental media, including mine features. This definition was also combined with the definition of remedial action so that it states that remediation is being conducted to reduce the addition of pollutants into surface waters.

COMMENT #9: Suggest revising the term "Remediating Person" to "Remediating Entity" or "Remediating Party" for clarity and inclusiveness. With regards to what a "remediating person/entity/party" is under the Rule, perhaps ADEQ should clarify to address whether a remediating entity will be expected to possess any minimum level of education, certification, or state-recognized licensure to conduct remediation activities (e.g. Professional Geologist, Professional Engineer, Certified Environmental Professional, or similar qualifications). Alternatively, or in addition, if hiring a contractor to represent the remediating entity, clarify if the contractor must hold these qualifications and/or if the contractor's subcontractor's will be expected to hold any specific credentials (e.g. Arizona Registrar of Contractor's license for drilling, excavating, installing post-tension piers, asphalt paving, etc.). Perhaps a catch-all phrase could capture this to ensure it's included in the Rule, such as "The remediating entity shall possess, or retain appropriately qualified professionals who possess all applicable federal, state, and local licenses, certifications, and qualifications required to perform the work."

RESPONSE #9: The definition of "remediating person" has been removed from R18-9-1101 and replaced with the definition of "person". The definition of "person" includes all of the same entities/persons as the definition of "remediating person" and also clarifies that it applies to those engaged in remediating an abandoned mine.

State procurement regulations already stipulate minimum qualifications for contractors that ADEQ can use to take on remediation projects, thus no change has been made to the rule as a result of this comment.

COMMENT #10: There is an existing definition for “waters of the state”, under Arizona Revised Statutes (A.R.S.) § 49-201. Since this term is included under the definition for “WOTUS”, suggest it is defined as its own entry.

RESPONSE #10: A definition for “waters of the state” has been added to AAC R18-9-1101.

COMMENT #11: The definition provided for “WOTUS Protected Surface Water” is unclear. WOTUS has already been defined. The difference between a “WOTUS” and “WOTUS Protected Surface Water” needs to be clarified. Suggest that ADEQ instead provide a standalone definition of “Protected” and/or use the definition of “Protected Surface Waters” as defined in A.R.S. § 49-201.

RESPONSE #11: ADEQ is incorporating the definitions that are set out in Title 49, Chapter 1 to maintain consistent definitions throughout Title 49.

COMMENT #12: Several terms are used within definitions but are not themselves defined, which can create ambiguity and potential inconsistency in application throughout the proposed rule. The following terms should be provided as standalone definitions:

- a. “Contaminated Environmental Media”
- b. “Hardrock Mine”
- c. “Health and Safety Plan” (not used in definitions but appears under R18-09-1104 (B)(6))
- d. “Protected” and/or “Protected Surface Water”
- e. “Pollution”
- f. “Remedial Objectives” (not used in definitions but appears under R18-09-1104(B)(2))
- g. “Technical Practicability” (not used in definitions but appears under R18-09-1105 (B)(6))
- h. “Waters of the State”

RESPONSE #12:

ADEQ’s intent is to utilize definitions that already exist in Title 49, Article 1. As such,

- a. **A definition for “Contaminated Environmental Media” has been added to R18-9-1101.**
- b. **“Hardrock Mine” has been removed from the new article.**
- c. **ADEQ prefers not to be too restrictive in rule, but rather provide guidance on what Health and Safety Plans should include. No definition has been added.**
- d. **A definition for “protected surface water” has been added to R18-9-1101.**
- e. **A definition for “pollution” has been added to R18-9-1101.**
- f. **A definition of the term “remedial objectives” is not needed as the plain language is already**

clear.

g. A definition of this term “technical practicability is not needed as the plain language is already clear.

h. A definition for “Waters of the State” has been added to R18-9-1101.

AAC R18-9-1102

COMMENT #13: 1102 (A) and (B): The preamble repeatedly characterizes the proposed program as voluntary and limited in scope, emphasizing that participation is not mandatory and that no new regulatory burden is intended for the private sector. However, the regulatory text in R18-09-1102 does not clearly or consistently reflect this stated intent. Specifically, R18-09-1102(A)(1) provides that the Article applies to “the remediation of nonpoint source pollution from abandoned hardrock mines,” without further defined limitation. This language could reasonably be interpreted to apply to any such remediation activity, regardless of whether it is conducted voluntarily, independently, or with Department-administered funding. The current applicability language creates ambiguity as to whether the Rule is intended to apply only to participants in a voluntary, state-administered program, or more broadly to any party conducting such remediation activities. To improve clarity and ensure consistency with the stated intent in the preamble, it may be beneficial to revise the applicability language to explicitly state that the article applies only to entities that voluntarily elect to participate in the program, such as by accepting Department-administered funding or otherwise enrolling in the program.

RESPONSE #13: To provide greater clarity, the applicability requirements of subsections (A)(1) and (A)(2) have been combined into new Section (A). Also, see response to AMA’s Comment #12 for additional rationale.

COMMENT #14: 1102(A)(2): Suggest adding language requiring that a remediating entity meet eligibility or participation requirements established by the Department program administering the funds. These requirements need not be specified in the rule, as they may be addressed through programmatic guidance.

RESPONSE #14: ADEQ appreciates this comment, however, no change has been made to the rule as a result of this comment. Should ADEQ establish eligibility or participation requirements, they will be addressed through programmatic guidance documents.

COMMENT #15: 1102(B)(3): The statement that disallows “[d]ischarges or suspected discharges from sources currently managed under a state or federal permit or any other A.R.S. Title 49 program” is essentially saying that if a discharge is already being handled under another regulatory program, the remediating entity cannot enter the abandoned hardrock mine remediation program too. However, not all Title 49 programs are built to handle remediation

requirements. An entity may fall under a Title 49 program that focuses on compliance (e.g. stopping the discharge) but doesn't handle the remediation of impacts related to the discharge. In this case, it may be a programmatic hand-off and there would be no overlap, but in some cases it might be better for both programs to work congruous, such as emergency response actions.

RESPONSE #15: The broad exclusion of all Title 49 programs is intentional, as these rules are narrow in scope. The existence of any Title 49 program assumes a responsible party, which would exclude it from these rules. No change has been made to the rule as a result of this comment.

AAC R18-9-1103

COMMENT #16: 1103: Tetra Tech recommends ADEQ consider amending the proposed rule to include the requirement of a comprehensive scope of work, which could be referred to as a Site Assessment (Work) Plan, to be completed prior to conducting a Site Assessment. Developing such a pre-approval document would provide ADEQ with an instrument to approve proposed work as well as ensure there are no data gaps in the proposed work which could result in an extended timeline, scope creep, or excessive expenditure of funds. This scope of work, once reviewed and approved by ADEQ, would serve as formal scope concurrence. Since every site is different, a work plan affords ADEQ the opportunity to set boundaries and site-specific requirements.

RESPONSE #16: ADEQ has revised R18-9-1103 to add a new subsection that requires the Department or a person to prepare a Site Assessment Work Plan prior to conducting the site assessment. The section also describes what information the Site Assessment Work Plan should contain.

COMMENT #17: 1103(B)(1) and (B)(2): Recommend changing "extent" to "nature and extent". The nature of a release and the extent of the impacts are critical to understanding and characterizing a Site.

RESPONSE #17: ADEQ revised "extent" to "nature and extent" within the context of this rule.

COMMENT #18: 1103(B)(4): The definitions in R18-9-1101 do not make clear the difference between a "WOTUS" and "WOTUS protected surface waters".

RESPONSE #18: ADEQ appreciates this comment, however, ADEQ's intent is to utilize definitions that already exist in Title 49, Chapter 2, Article 1. As such, no change has been made to the rule as a result of this comment.

COMMENT #19: 1103(C): Recommend enhancing and clarifying the verbiage in this section. The language "[u]sing the data developed during the site assessment and information collected a site-specific risk evaluation may be conducted

to characterize the current risks to public health and the environment from the pollution” could be perceived as ambiguous. Recommend something that clarifies the characterization data must be vetted through ADEQ first, before moving to a risk evaluation, to ensure the Department concurs that characterization is complete and that enough data has been collected to properly represent this Site in a risk evaluation. Language such as “[u]sing the data collected, evaluated, and vetted through the Department...” could provide assurance that the remediating entity understands the phased process detailed in R18-9-1103(B) requires ADEQ buy-in every step of the way. A pre-approved Work Plan that discusses how a risk assessment will be conducted would help solidify this understanding.

RESPONSE #19: Section R18-9-1103(C) has been revised to “Using the data collected, evaluated, and vetted through the Department....”.

COMMENT #20: 1103(D): “The site assessment may consist of a summary...” is lenient language. Tetra Tech recommends ADEQ strengthen this provision by using “shall” instead of “may” to ensure sufficient information is provided to ADEQ for review and concurrence.

RESPONSE #20: ADEQ appreciates this comment, however, ADEQ has intentionally drafted these rules to be flexible. Rather than developing rigid rules, ADEQ is looking to formalize a process for remediating nonpoint source pollution from abandoned mine lands and then build up that process over time. No change has been made to the rule as a result of this comment. ADEQ has moved this language to subsection E in the final rule.

AAC R18-9-1104

COMMENT #21: 1104(A): Suggest adding in the language “Unless otherwise pre-approved by the Department” in front of “[p]rior to engaging in remedial action pursuant to A.A.C. R18-9-1105, the Department or a remediating person shall prepare a remedial action plan.” By adding in the additional language, it allows the program to move forward with site-specific instances such as emergency response actions, actions deemed sensible to complete during characterization, or other actions which make sense to complete prior to preparing a RAP and awaiting full RAP approval.

RESPONSE #21: Section R18-9-1104(A) was revised to add “Unless otherwise pre-approved by the Department” in front of “[p]rior to engaging in remediation...”.

COMMENT #22: 1104(B): Suggest adding in the language “shall include, but is not limited to....” because there could be site-specific items that may not be called out here in Rule but would be fundamental to preparing an administratively complete remedial action plan (RAP). For instance, an RAP requiring earthmoving and repository building might require an Erosion Control Plan or an Air Quality Monitoring Plan, but a RAP to lay down limestone to install a passive surface water treatment system might require neither of these things. The “but is not limited to” clause gives ADEQ flexibility to

consider site-specific requirements as they arise without locking all remediating parties into the same requirements.

RESPONSE #22: Section R18-9-1104(B) has been revised to “The remediation plan shall include, but is not limited to the following:”.

COMMENT #23: 1104(B): Since there is no required Site Assessment Report, suggest adding a bullet that indicates the Remedial Action Plan needs to summarize findings of the assessment and specifically sources of NPS impacts to WOTUS and establish the remedial objectives. This ties back to our comment in R18-9-1103(D), above, where we indicated the site assessment summary requirements are not explicitly requiring all the information necessary to move into a Remedial Action Plan. If this is addressed under R18-9-1103(D), it may not need to be readdressed here.

RESPONSE #23: ADEQ appreciates this comment, however, no change has been made to the rule as a result of this comment. ADEQ has intentionally drafted these rules to be flexible. Rather than developing rigid rules, ADEQ is looking to formalize a process for remediating nonpoint source pollution from abandoned mines and then build up that process over time. Additionally, ADEQ has revised R18-9-1103 to add a new subsection that requires the Department or a person to prepare a Site Assessment Work Plan prior to conducting the site assessment as noted in the response to Comment 16.

COMMENT #24: 1104(B)(6): If including the requirement for a Health and Safety Plan (HASP), suggest adding a definition for a HASP in Section 1101, which at a minimum explains what the document is and potentially provides the basic requirements for the document.

RESPONSE #24: ADEQ appreciates this comment, however, no change has been made to the rule as a result of this comment. If necessary, ADEQ will address this through programmatic guidance documents.

AAC R18-9-1105

COMMENT #25: 1105(A): In reviewing existing A.R.S. and A.A.C authorities, the term “assure” appears most frequently in permitting contexts, including RCRA-based programs, and is not commonly used in ADEQ’s existing remedial action frameworks. For example, Title 18, Chapter 7 relies on standards that are “protective of human health and the environment” rather than assurance-based phrasing. This difference in terminology may create inconsistency with existing Arizona remediation standards.

RESPONSE #25: For clarity, R18-9-1105(A)(1) has been revised to “Protect public health and the environment; and”.

COMMENT #26: 1105(B)(4): The proposed rule for remedial actions requires consideration of the effects of “pollution

on the aquatic and terrestrial biota". However, the preceding assessment requirements (R18-9-1103) do not explicitly require evaluation of impacts to aquatic or terrestrial biota. If such effects are intended to inform remedial action decisions, these receptors should be identified as required assessment endpoints in the characterization/assessment section. Absent of this, the requirement under remedial action lacks a defined analytical basis and may result in inconsistent or unsupported evaluations.

RESPONSE #26: ADEQ appreciates this comment, however, no change has been made to the rule as a result of this comment. Aquatic and terrestrial biota would be covered under "environment" in R18-9-1103(A)(2) which requires a person "Identify current and potential impacts to public health and the environment" as part of the site assessment.

COMMENT #27: 1105(B)(6): Does ADEQ have metrics in place to support what the program will use to determine technical practicability, or impracticability? Recommend cross-referencing an existing program's statutes or rules that establish the definition for what may be deemed impracticable, or at a minimum, define the term in the R18-9-1101. Furthermore, who or what will determine what is cost-effective? Is a feasibility study going to be required as the basis for this determination?

RESPONSE #27: ADEQ appreciates this comment, however, no change has been made to the rule as a result of this comment. Issues of technical practicability, cost effectiveness, etc. will be addressed through programmatic guidance documents.

COMMENT #28: 1105(B)(7): The phrase "impact on groundwater quality" is not defined relative to a standard. Impact relative to what benchmark? Suggest cross-referencing A.A.C. Title 18, Chapter 11, specifically A.A.C. R18-11-406, to establish the applicable aquifer water quality standards. If a rule cross-reference is not intended, at a minimum the relevant statutory authority for groundwater protection should be cited (e.g., A.R.S. §§ 49-203, 49-221, and/or 49-225).

RESPONSE #28: ADEQ appreciates this comment, however, no change has been made to the rule as a result of this comment. ADEQ has intentionally drafted these rules to be flexible. Rather than developing rigid rules, ADEQ is looking to formalize a process for remediating nonpoint source pollution from abandoned mines and then build up that process over time.

COMMENT #29: 1105(C): If leaving this requirement here, Tetra Tech recommends changing the language slightly, to state that "[t]he work performed under this Section shall comply with any otherwise applicable laws and rules." This broadens the original intent of this statement to not only cover the physical, in-field remedial action, but also any work

leading up to conducting the field work. This broader language captures everything, including work to be completed prior to, and after, going in the field. For instance, if a town has an ordinance that public notice must be posted on the town website prior to initiating field work, this broader language captures the requirement, an otherwise applicable municipal law, without any question.

That said, ADEQ might consider moving 1105(C) out from under remedial action specifically and move it to an overarching requirement in A.A.C. R 18-9-1102. Otherwise, where is the requirement to follow all other laws and rules when completing site assessments under A.A.C. R 18-9-1103? As it is written now, the requirement is specific only to R18-9-1105. It could be worded under A.A.C. R18-9-1102 in a new paragraph to say something akin to “[a]ll work performed under Article 11-Remediation of Nonpoint Source Pollution from Abandoned Mines, shall comply with any otherwise applicable laws and rules.”

RESPONSE #29: ADEQ agrees this should be an overarching requirement that applies in every phase of these remediation projects. As such, R18-9-1105(C) has been removed from this section and placed in the Applicability section (R18-9-1102(C)) to ensure it is clear that the provision applies to all sections of the article.

AAC R18-9-1106

COMMENT #30: 1106: It is unclear whether a remedial action completion report will be required. If not required, what mechanism will be used for the remediating entity to document that all work has been completed in accordance with the approved plan and that all applicable permits and requirements have been obtained and satisfied?

RESPONSE #30: R18-9-1106 has been revised to require a remediation completion report that shall be approved by ADEQ. In addition, the section has been revised to list out the required contents of the report.

COMMENT #31: 1106(A): Only the Department should have authority in making a determination of whether remedial objectives have been met. The remediating entity can propose the work is complete and objectives are met, and present this argument at the conclusion of the work, but only the Department should have the authority to make a determination regarding the proposal.

RESPONSE #31: R18-9-1106(A) has been revised to remove “or remediating person”.

COMMENT #32: 1106(B): The term “previous site” is not defined. As written, it is unclear whether this refers to a separate site or to a site where prior characterization and/or remedial actions have already occurred. It may be clearer to revise the provision to state: “[t]he Department or a remediating entity may take additional remedial action at a site where prior characterization and/or remedial actions have occurred under this rule, for any of the following reasons:”.

RESPONSE #32: For clarity, R18-9-1106(B) has been revised to replace “previous site” with “action at a site where a remediation has previously been performed under this article...”.

AAC R18-9-1107

COMMENT #33: 1107(A): Limiting the terminology to “access agreements” may create confusion in application, particularly in a state where surface entry rights and mineral rights (and the associated rights of access) may be bifurcated. As written, the provision could be interpreted too narrowly, implying that a single agreement may be sufficient in some cases, when in practice multiple permissions or legal instruments may be required to establish lawful access. It may be beneficial to broaden the language so that it functions as a clearer gatekeeping requirement, without prescribing specific mechanisms. For example, stating “[p]rior to initiating a site assessment or remedial action, the Department or a remediating entity shall ensure that all necessary and legally valid access rights have been obtained” would better reflect the range of potential access considerations while maintaining flexibility.

RESPONSE #33: R189-1107(A) has been revised to make sure valid access rights have been obtained.

Misc.

COMMENT #34: Tetra Tech suggests there should be some type of a close-out determination or documentation for the remediating entity to receive to demonstrate that work has been completed to the state’s satisfaction. Many other similar mechanisms exist under Title 49 and provide formal documentation of completion under applicable regulatory standards. This type of documentation, and the associated authority to modify or rescind such determinations if warranted, should be addressed in the proposed rule.

RESPONSE #34: ADEQ appreciates this comment. Given the voluntary nature of the program, consistent with the national CWA Section 319 program, a formal close-out determination is not necessary. Further, the nature of remediated abandoned mines does not necessitate a formal close-out considering future monitoring and enhancements of the remediation may be needed to address site degradation or achieve additional reductions in contamination. To reflect the process concern of the commenter, ADEQ has added an informal, remediation closeout report to R18-9-1106 that is addressed in comment #37.

COMMENT #35: It does not appear stakeholder outreach is fully considered under this proposed rule, neither under site assessment nor remedial action. There is no clear language indicating a remediating entity would need to conduct adequate outreach to ensure relevant parties are engaged, as appropriate, prior to initiation of a remedial action. At a minimum, recommend cross-referencing other applicable statutes or rules where such outreach requirements are already clearly defined.

RESPONSE #35: ADEQ appreciates this comment, however, no change has been made to the rule as a result of this comment. The federal CWA Section 319, nor applicable EPA grant guidance require formal stakeholder outreach when implementing these projects. So long as ADEQ and/or a person remediating a mine site have obtained proper access to a site, stakeholder outreach would be considered adequate.

COMMENT #36: It does not appear that consultation with the State Historic Preservation Office (SHPO) is considered under this proposed rule. Consultation with SHPO is required in many instances prior to initiation of a remedial action. Pursuant to A.R.S. § 41-861 et seq., SHPO consultation is required when a state agency is carrying out, funding, and/or approving an undertaking that may affect historic properties listed in, or eligible for, the National Register of Historic Places. This may include instances where a state agency is acting as the lead, providing funding, issuing approvals or authorizations, and/or when the action is occurring on Arizona State Land Department (ASLD) owned or leased land. Furthermore, aside from the funding source, SHPO review may also be triggered by components of a remedial action occurring on state land, even if the primary project is located on private property. For example, if access to a private property requires construction or improvement of a road across adjacent ASLD land, that activity may constitute a state undertaking and require SHPO consultation.

RESPONSE #36: ADEQ appreciates this comment, however, no change has been made to the rule as a result of this comment. SHPO consultation and compliance with its rules and regulations would be covered under R18-9-1102(C), which states that “Remediation and all associated remediation activities being performed under this article shall comply with any and all applicable laws and rules”.

COMMENT #37: It does not appear there is a provision planned for post remediation monitoring or a hand-off to a program with such rules already in place. Recommend post remediation monitoring is touched upon in this proposed rule.

RESPONSE #37: Section R18-9-1106 has been revised to require a remediation completion report. In addition, the section has been revised to state the requirements for a remediation completion report, which includes a description of post remediation monitoring activities.

13. All agencies shall list other matters prescribed by statute applicable to the specific agency or to any specific rule or class of rules. Additionally, an agency subject to Council review under A.R.S. §§ 41-1052 and 41-1055 shall respond to the following questions:

Not applicable.

- a. Whether the rule requires a permit, whether a general permit is used and if not, the reasons why a general

permit is not used:

The application of these rules do not require issuance of a permit or a license.

- b. Whether a federal law is applicable to the subject of the rule, whether the rule is more stringent than federal law and if so, citation to the statutory authority to exceed the requirements of federal law:**

There is no federal law that is directly applicable to the subject of the rule. This rule outlines a process in which ADEQ will use grant funds issued under CWA Section 319. This rule does not lay out any requirements for the receipt of those funds. Those requirements are laid out in EPA's "NPS Program and Grants Guidelines for States and Territories" (2024) as well as in the pass-thru Terms and Conditions section in the Grant Agreement between ADEQ and the sub-recipient.

- c. Whether a person submitted an analysis to the agency that compares the rule's impact of the competitiveness of business in this state to the impact on business in other states:**

Not applicable

- 14. A list of any incorporated by reference material as specified in A.R.S. § 41-1028 and its location in the rules:**

Not applicable

- 15. Whether the rule was previously made, amended or repealed as an emergency rule. If so, cite the notice published in the *Register* as specified in R1-1-409(A). Also, the agency shall state where the text was changed between the emergency and the final rulemaking packages:**

Not applicable

- 16. The full text of the rules follows:**

Rule text begins on the next page.

TITLE 18. ENVIRONMENTAL QUALITY

CHAPTER 9. DEPARTMENT OF ENVIRONMENTAL QUALITY – WATER POLLUTION CONTROL

ARTICLE 11. REMEDIATION OF NONPOINT SOURCE POLLUTION FROM ABANDONED MINES

Section

<u>R18-9-1101.</u>	<u>Definitions</u>
<u>R18-9-1102.</u>	<u>Applicability</u>
<u>R18-9-1103.</u>	<u>Site Assessments</u>
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<u>R18-9-1105.</u>	<u>Remediation</u>
<u>R18-9-1106.</u>	<u>Remediation Completion</u>
<u>R18-9-1107.</u>	<u>Access to Abandoned Mines</u>

ARTICLE 11. REMEDIATION OF NONPOINT SOURCE POLLUTION FROM ABANDONED MINES

R18-9-1101. Definitions

1. “Abandoned Mine” has the same meaning as defined in A.R.S. §27-301.
2. “Contaminated Environmental Media” means rock, soil, sediment, groundwater, or surface water containing a pollutant or pollutants at a concentration above an applicable standard (where established) or that is defined as a hazardous substance in A.R.S. §49-201.
3. “Department” means the Department of Environmental Quality.
4. “Discharge” means the direct or indirect addition of any pollutant to a WOTUS or WOTUS protected surface water.
5. “Hazardous Substance” has the same meanings as defined in A.R.S. §49-201.
6. “Nonpoint Source” has the same meaning as defined in A.R.S. §49-201.
7. “Owner” means any person or entity, including a Tribal Nation, that holds fee simple title to all or part of a property, a restricted fee interest in tribal or allotted lands, or a beneficial or equitable interest in land held in trust by the United States. For lands held in trust by the United States, the term “Owner” refers to the tribal or individual beneficial interest holder and does not include the United States in its capacity as trustee.
8. “Person” means any individual, corporation, company, partnership, firm, association, society of persons, the federal government and any of its departments or agencies, Arizona or any of its agencies, departments, political subdivisions, counties, towns, municipal corporations, a Tribal Nation, an authorized tribal organization, or a member of a federally recognized Tribal Nation, that is engaged in remediating an abandoned mine.
9. “Point Source” has the same meaning as defined in A.R.S. §49-201.
10. “Pollutant” has the same meaning as defined in A.R.S. §49-201.

11. "Pollution" means the spread of a pollutant, as defined in A.R.S. §49-201, into the air, land, surface water, or groundwater.
12. "Protected surface waters" has the same meaning as defined in A.R.S. §49-201.
13. "Remediation" means the treatment, removal, isolation, or containment of contaminated environmental media or mine features to prevent or reduce the addition of a pollutant or pollutants into a WOTUS or WOTUS protected surface water.
14. "Site" means the areal extent of contamination suspected or known to be adding pollution into a WOTUS or WOTUS protected surface water.
15. "Waters of the State" has the same meaning as defined in A.R.S. §49-201.
16. "WOTUS" has the same meaning as defined in A.R.S. §49-201.
17. "WOTUS Protected Surface Water" has the same meaning as defined in A.R.S. §49-201.

R18-9-1102. Applicability

- A. This Article applies to any person who accepts and utilizes state and/or federal funds administered by the Department to conduct a remediation project that includes addressing nonpoint source pollution from an abandoned mine.
- B. This Article does not apply to:
 1. Pollution or suspected pollution from nonpoint sources other than abandoned mines;
 2. Discharges or suspected discharges solely from point sources with no nonpoint source contribution; and
 3. Discharges or suspected discharges from sources currently managed under a state or federal permit, any other A.R.S. Title 49 program, or the mined land reclamation program established pursuant to A.R.S. Title 27, Chapter 5, Article 1.
- C. Remediation and all associated remediation activities being performed under this Article shall comply with any and all applicable laws and rules.

R18-9-1103. Site Assessments

- A. The Department or a person shall conduct a site assessment before preparing a remedial plan under R18-9-1104. The purpose of a site assessment is to identify and quantify potential physical hazards, environmental risks, or other site conditions that could potentially affect the scope of remediation activities. The site assessment shall:
 1. Establish the nature and extent of the nonpoint source pollution;
 2. Identify current and potential impacts to public health and the environment; and
 3. Obtain and evaluate any other information necessary for identification of remediation options.
- B. Prior to performing the site assessment, the Department or a person shall prepare a Site Assessment Work Plan that may include, but is not limited to the following:
 1. A description of site assessment activities, including the types of samples to be collected and the analyses to be performed;
 2. A map or figure illustrating the general site location, site features, and the locations where samples are to be collected;
 3. A description of site assessment objectives;

4. A timeline for site assessment activities; and

5. A Health and Safety Plan.

C. The site assessment, which may be conducted in one or more phases, shall include a field assessment to evaluate the following factors:

1. Physical characteristics of the site;

2. The nature and extent, and general characteristics of the pollutants on site;

3. The extent, general characteristics, and degree of the source(s) of the nonpoint source pollution associated with the site; and

4. Current and reasonably foreseeable impacts to WOTUS or WOTUS protected surface waters.

D. Using the data collected, evaluated, and vetted through the Department, a site-specific risk evaluation may be conducted to characterize the current risks to public health and the environment from the pollution.

E. The site assessment may consist of a summary of the data and information collected with references to the supporting documentation.

R18-9-1104. Remediation Plans

A. Unless otherwise pre-approved by the Department, prior to engaging in remediation pursuant to R18-9-1105, the Department or a person shall prepare a remediation plan.

B. The remediation plan shall include, but is not limited to the following:

1. A description of the remediation, including its objectives;

2. A description of how the remediation will achieve the remedial objectives and how accomplishment of the remedial objectives will be measured;

3. A timeline for implementation or construction of the remediation;

4. The total estimated cost of the remediation;

5. The expected operational life of the remediation; and

6. A Health and Safety Plan.

R18-9-1105. Remediation

A. Remediation shall:

1. Protect public health and the environment; and

2. To the extent practicable, provide for the control, management, and cleanup of nonpoint source pollutants in order to further the goal of restoring and maintaining the chemical, physical and biological integrity of WOTUS and WOTUS protected surface waters.

B. When selecting the type of remediation, the Department or a person may consider the following factors:

1. Population, environmental, and welfare concerns at risk;

2. Routes of exposure;

3. Impact of the pollution on the uses of the waterbody;
 4. Impact of the pollution on the aquatic and terrestrial biota;
 5. Amount, concentration, hazardous substances, environmental fate, such as the ability to bioaccumulate, persistence and probability of reaching WOTUS and WOTUS protected surface waters, and the form of the substance present;
 6. The technical practicality and cost-effectiveness of alternative types of remediation applicable to a site;
 7. The impact on groundwater quality; and
 8. The availability of other appropriate federal or state remediation and enforcement mechanisms, including other funding sources, to respond to the pollution.
- C. The type of remediation shall be selected based upon best engineering, geological, or hydrogeological judgment following engineering, geological, or hydrogeological standards of practice.

R18-9-1106. Remediation Completion

- A. After project completion, the Department or a person shall prepare a remediation completion report.
- B. The remediation completion report shall at a minimum contain the following:
1. A description of the remediation and how it was used to meet project objectives;
 2. The final cost of the remediation;
 3. Final figures including, but not limited to, as-builts, technical drawings, and maps;
 4. A description of operating and maintenance requirements to ensure the remediation continues to serve its intended purpose; and
 5. A description of post remediation monitoring activities.
- C. When the remediation completion report is prepared by a person, other than the Department, the Department shall review the report to determine whether the objectives in the remediation plan have been met. The determination may be made by the Department based upon, but not limited to any of the following:
1. A reduction in pollutant loading in a waterbody;
 2. A reduction in the mobility or migration of pollutants;
 3. A reduction in pollutants that will positively affect aquatic and terrestrial biota;
 4. Reasonable and foreseeable impacts to WOTUS and WOTUS-protected surface waters;
 5. The remediation has contributed to preserving and protecting the quality of surface waters within the project area for all present and reasonably foreseeable future uses; or
 6. The waterbody is meeting applicable surface water quality standards.
- D. The Department or a person may take additional action at a site where remediation has previously been performed under this Article for any of the following reasons:
1. On discovery of new information;

2. That information submitted to the Department under this Article was inaccurate, misleading, or incomplete;
3. The remediation implemented did not achieve the remedial objectives; or
4. The Department determines that remediation is necessary to respond to a release or the threat of a release of a pollutant or hazardous substance that may present a risk to the public health or the environment.

R18-9-1107. Access to Abandoned Mines

- A. Prior to initiating any activity under this Article, the Department or a person shall ensure that all necessary and legally valid access rights have been obtained from the owner of the site and any other party whose consent is legally required.