



December 2, 2024

Trevor Baggione
Director, Water Quality Division
Arizona Department of Environmental Quality 1110
West Washington Street
Phoenix, Arizona 85007

Sent via email to reuserulemaking@azdeq.gov and by [Online Comment Form](#)

Re: WateReuse Arizona Comments on ADEQ's 2024 Advanced Water Purification Proposed Rules

Dear Mr. Baggione,

WateReuse Arizona commends the Arizona Department of Environmental Quality's commitment to write regulations that allow a water provider to purify recycled water for drinking water. As The Authority on Water Reuse, the comments of WateReuse Arizona on the proposed rules for Advanced Water Purification (AWP) should be considered with the utmost respect for the immense amount of work that has brought us to the point of proposed regulations. We are incredibly excited to have reached this final step. Our final set of comments on this effort were derived through input from unparalleled expertise across our membership. Our membership is comprised of utilities, consultants, and vendors who have spent entire careers operating, designing, and testing water and wastewater systems.

We find that the proposed rules are comprehensive yet out of balance. In our opinion, some aspects of the rules lead to over-regulation and in some aspects the rules are dismissive of the existing processes and requirements administered or regulated by EPA and ADEQ. While we recognize the comprehensive nature of the proposed rules, we are concerned that they may be overly burdensome and not sufficiently aligned with existing EPA and ADEQ requirements regarding source water. If ADEQ determines that further regulation of source water is necessary, such regulations should apply uniformly to all water systems—not just those under AWP permitting—to enhance public health protection across both conventional and advanced wastewater and water treatment systems. We remain very concerned that these and the concerns listed below have the potential to make AWP unaffordable and infeasible for some communities. Our concern is from the perspective that the process of establishing new rules and regulations be fair, equitable, consistent, predictable, and consider the technological and economic cost-benefit in the development and application of rules that impact the public.

The first concern is with the strict requirement that the Direct Responsible Charge (DRC) be on-site at all times. We recommend that the language be adjusted to state that the DRC 'or their designee' must be available at all times. Additionally, the rule references that all collection and water reclamation facilities are operated by a grade 4 operator. We recommend Reclamation and Collections operations should be modified to apply in practical terms. Modifying the language to "operational oversight and management"

could provide the necessary flexibility, ensuring that operations are managed effectively without mandating continuous hands-on control by highly certified personnel.

Requiring the permittee to monitor for unregulated Tier 2 and some Tier 3 compounds is overly burdensome and we feel does not belong in an AWP permit. ***The requirement by rule to monitor for Tier 2 and Tier 3 compounds is unnecessarily burdensome to an AWP permittee and establishes de facto water quality regulation outside any CWA or SDWA framework which is a major concern of WateReuse Arizona.*** If ADEQ feels these compounds are a concern then shouldn't this monitoring be required in any other permit administered by ADEQ? The multi-barrier treatment technologies deployed for an AWP facility that ***purify water*** are inherently safer than any conventional water treatment system in Arizona. As an alternative, perhaps the framework for selecting Tier 2 chemicals as presented in the Rule could be included as guidance. ADEQ could work with the applicant to develop "performance-based indicators" based on unregulated chemicals unique to each permit and source watershed. The agreed-upon performance-based indicators could include Tier 2 and Tier 3 chemicals.


Requiring a wastewater system to deploy early-warning monitoring of the collections system does not fit with running an AWP. A wastewater utility may elect to conduct this step to assist with process control in operating its wastewater treatment process. However, the technology for early-warning systems relies on surrogate parameters and algorithms to correlate measured parameters to chemicals of concern. The technology is still relatively new to the industry and not what we would consider to be at a technological readiness level to be a requirement under rule.


We also believe that no other local or county government should have the ability to create a rule that could restrict the reuse activity permissible by the State. We recommend adding a provision in the rule related to: "No local or county governments are allowed to create a rule that prevents a community or water provider from implementing AWP."

Lastly, the proposed rules refer to AWP as a *voluntary* decision for a water provider. AWP very well could become an *essential* component of meeting a community's water demands. AWP being "voluntary" is an unacceptable basis for these over-reaching requirements that remain in the proposed rule.

We commend the hard work you all have dedicated towards Advanced Water Purification for Arizona. We look forward to our continued collaboration and final rules that protect public health at an affordable cost.

If you have questions, please feel free to reach out to us.

Thank you, 
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