GRAND CANYON TRUST

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By Electronic Mail

Jon Rezabek
Legal Specialist
Department of Environmental Quality
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Re: Aquifer Water Quality Standards – Proposed Implementation Rule

Dear Mr. Rezabek:

I'm writing on behalf of the Grand Canyon Trust to comment on the Department's draft implementation rule recently released as part of the Department's rulemaking to update aquifer water quality standards that are out of compliance with Arizona law.[1] There are two points we'd like to address.

First, we urge the Department to complete its rulemaking as soon as possible and to establish new water-quality standards that are, at a minimum, equivalent to the corresponding federal maximum contaminant levels for the pollutants at issue. As you know, updated standards for the seven pollutants in question are long past due under Arizona state law—by decades, in some cases. As a result, among other detrimental outcomes, it's possible that the Department has been issuing aquifer protection permits for many years that allow regulated parties to pollute the state's aquifers at levels that would have been forbidden had the Department promptly established AQWSs in compliance with state law. We view that as a serious problem that should be fixed without delay.

Second, we believe the draft implementation rule, R18-9-A215, could cause further unnecessary delay by requiring—or tolerating—years of baseline monitoring that may not be necessary for some aquifer protection permits to be properly updated.

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[1] The Grand Canyon Trust is a 501(c)(3) non-profit advocacy organization founded in 1985. The Trust's mission is to safeguard the wonders of the Grand Canyon and the Colorado Plateau, while supporting the rights of its Native peoples. We are headquartered in Flagstaff, Arizona and have more than 3,000 members and supporters. For decades, we have worked across the Four Corners region to secure protections for important cultural landscapes, to safeguard land, water, and the environment from uranium mining, to defend the unsustainable withdrawal of groundwater for development, to protect the Grand Canyon ecosystem, and to restore healthy forests and springs.

The draft rule, as we understand it, would create a two-part process for updating APPs when new or revised AWQSs are adopted. First, when changes to AWQSs become effective, the rule would compel permittees who are subject to discharge- or groundwater-monitoring requirements to begin baseline monitoring for the pollutants governed by those AWQSs, unless the permittee secures an exemption.[2] Baseline monitoring of groundwater would presumptively last two years, while monitoring of discharges would last one year.[3] Second, after completing baseline monitoring, the permittee would be required to submit a report for the Department to use in determining whether and how to establish or change the permit's alert levels, discharge limits, and aquifer quality limits.[4]

While this general framework may make sense for some permits, or even many permits, it is not evident to us that baseline monitoring would be necessary in all cases. It stands to reason that some APPs already require discharge- or groundwater monitoring that could supply adequate baseline data to revise that permit's terms. This seems especially probable in cases where an AWQS already exists for a given pollutant, like arsenic, and monitoring of that pollutant is ongoing under existing APPs. In that circumstance, it may be possible to establish baseline conditions with existing monitoring data.

We recognize that the draft rule allows permittees to elect to use existing baseline data to prepare a baseline monitoring report.[5] But for two reasons, that provision should be mandatory, not optional.

First, requiring permittees to use existing data where it is adequate to establish baseline conditions would avoid the lengthy delay associated with gathering new baseline data. And second, it would minimize the opportunity for permittees to attempt to exploit new baseline monitoring as a vehicle for establishing higher alert levels, discharge limits, and aquifer quality limits. That is, a permittee whose discharges might be adding relevant pollutants to an aquifer could use new monitoring to a establish a "baseline" that incorporates ongoing pollution and thus leads to permit limits that would be higher than had the baseline been established using monitoring completed immediately before the adoption of the new or revised AWQSs.[6]

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[2] Arizona Department of Environmental Quality, Draft Rule R18-9-A215 (Apr. 2024) ("Draft Rule") *available at* https://static.azdeq.gov/wqd/rulemaking/awqs/draft_rule.pdf.
[3] Draft Rule R18-9-A215.D.5 & 6.
[4] Draft Rule R18-9-A215.D.7.
[5] *See* Draft R18-9-A215.D.7.vi. We presume this provision is intended to operate as a substitute for new baseline monitoring, though the rule's text could be clearer on this point. Read strictly, the draft rule does not require submission of the baseline monitoring report until after completion of baseline monitoring, even if existing data is used to draft the report. Clarifying this point in association with the other revisions we urge in this letter would improve the rule.
[6] We recognize that requiring permittees to use outdated monitoring data could raise retroactivity questions by establishing a "baseline" that no longer exists due to discharges

The APP for a uranium mine near the Grand Canyon, once called the Canyon Mine, and now rechristened the Pinyon Plain Mine, exemplifies the potential problem. That APP, which was issued in April 2022, requires the mine's owner to take at least 2.5 years' worth of quarterly "ambient" groundwater samples in the mine's compliance wells.[7] This includes samples of arsenic and uranium, which are among the pollutants at issue in the Department's rulemaking.[8] The permit then provides methods for establishing alert levels and aquifer quality limits based on the ambient sampling.[9] For uranium, the AQL must be calculated using the current federal maximum contaminant level of 30 µ/L in the way that existing AWQSs are used for other contaminants.[10]

It's our understanding that, under the foregoing process, arsenic and uranium ALs and AQLs have recently been established for the mine's point-of-compliance well in the deep Redwall-Muav aquifer, and ambient monitoring is likely nearing completion for the three POC wells in the shallower Coconino aquifer.[11] So far as we can discern, it would be straightforward to recalculate the ALs and AQLs using this existing monitoring data once the new AWQSs are effective.

In this circumstance, we cannot see how the protective purposes of the aquifer-protection program would be served by requiring baseline monitoring to begin anew when the upcoming AWQS rule is complete, or by allowing the mine's owner to choose to redo its baseline monitoring. In the worst case, the mine might be discharging uranium or arsenic into the aquifers it is monitoring, and new monitoring could yield an elevated "baseline" that could allow for elevated ALs and AQLs to be calculated for the APP, effectively approving of polluting discharges that would have been disallowed using a baseline unaffected by ongoing pollution. Even if that does not happen, two additional years of baseline monitoring could delay the establishment of ALs or AQLs (if they remain incomplete before the rulemaking is finished) or delay the amendment of those limits to reflect the updated AWQSs.[12]

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authorized by existing APPs. In the interest of pragmatism, we're purposely focusing our request here about the use of existing baseline data on the period immediately preceding the updated AWQSs.

[7] *See* State of Arizona, APP No. P-100333 § 2.5.3.2 (Apr. 28, 2022) (requiring ten rounds of ambient groundwater monitoring) ("Canyon Mine APP"); *id.* at Table 8 (requiring quarterly sampling frequency).

[8] *Id.* at Table 8.

[9] *Id.* at §§ 2.5.3.3 to 2.5.3.5.

[10] *Id.* at 2.5.3.5.

[11] *See* Ltr. from Energy Fuels (USA) Inc. to ADEQ re: Pinyon Plain Mine, Individual Aquifer Protection Permit No. P-100333, Annual Report for 2023, p. 2 (Jan. 24, 2024).

[12] In making these observations, we do not mean to acquiesce in the idea that the Canyon Mine's APP is adequate to forestall groundwater contamination by the mine. Rather, we mean merely to accept that the APP has been adopted by ADEQ and remains in effect, and it would be detrimental for updated AWQSs to interrupt or undermine the APP's compliance provisions, even if those provisions could be improved.

We wish to stress that the problem we're envisioning is not theoretical. Mining is ongoing and expected to last only 28 months. And levels of uranium and arsenic greatly exceeding the federal MCLs have been detected in water discharging into the mineshaft, which is not far from the POC wells in the Coconino aquifer. Given these conditions, establishing ALs and AQLs in the Canyon Mine's APP and then transitioning to compliance monitoring is vital.

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We urge the Department to amend the proposed rule to require any permittee who has adequate baseline data as of the effective date of the new or revised AWQS to promptly submit a baseline monitoring report using that data, so that the Department may rapidly establish or adjust the relevant permit limits. Only if that data is lacking or inadequate in some respect, should new baseline data be gathered.

Thank you for the opportunity comment. For follow up questions or concerns, please contact Amber Reimondo, Energy Director, at (928) 286-3361 or areimondo@grandcanyontrust.org.

Sincerely,

Amanda Podmore
Grand Canyon Director