

# CHARTER

## Direct Potable Reuse (DPR) Technical Advisory Group (TAG)



ADEQ is establishing a TAG to provide recommendations on specific issues to improve the direct potable reuse permitting program in accordance with the ADEQ mission and vision.

### ADEQ Mission

Our mission is to protect and enhance public health and the environment in Arizona.

### ADEQ Vision

Our vision is to be the No. 1 state in the nation in balanced, leading-edge environmental protection through technical and operational excellence, and radical simplicity for customers and staff.

<b>Work Group</b>	<b>Direct Potable Reuse Technical</b>	<b>Chair</b>	Karthik Kumarasamy, ADEQ
<b>Date</b>		<b>Version</b>	#1

<b>Background and Objective</b>	<p>Many areas in Arizona are facing significant water resource challenges that require localized solutions. Challenges are due to extended drought conditions, impending cuts to Central Arizona Project (CAP) deliveries, and rapid population and economic growth.<sup>1</sup> At Lake Mead’s current elevation,<sup>2</sup> Arizona faces a Tier 1 water shortage in 2022 under the Drought Contingency Plan agreements, requiring Arizona to reduce its receipt and use of CAP water by approximately 30% of CAP’s normal delivery volume.<sup>3</sup></p> <p>DPR of recycled water through advanced water purification is a proven way to provide an additional source of safe drinking water. In 2017, ADEQ modified the reclaimed and gray water rules to remove the prohibition on direct use of reclaimed water for potable use (effective in 2018) and allow DPR. However, as described in the <i>Notice of Final Rulemaking</i> published in 2017, the current rule, A.A.C. R18-9-E701, was intended to be interim.<sup>4</sup></p>
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<sup>1</sup> See ASU’s *Colorado River Shortage Story Map*, available at <http://click.reply.asu.edu/?qs=cfdc507cf3a48cd6de6582822fed63bb1e5bd932d892c063eafb882a5cc80b648f6a61a1470ea35d625deef85e6b50029f2521637a251b1b> (last visited Dec. 8, 2021).

<sup>2</sup> Bureau of Reclamation, “2-Year Probabilistic Projections,” available at <https://www.usbr.gov/lc/region/g4000/riverops/crmms-2year-projections.html> (last visited Dec. 8, 2021).

<sup>3</sup> This equates to 512,000 acre-feet of water, which is enough water to support between 2 and 4 million people a year in metropolitan areas in Arizona. An acre-foot is about 325,000 gallons, or enough water for two to three metropolitan households for a year.

<sup>4</sup> See *Notice of Final Rulemaking*, 23 A.A.R. 3091, 3093 and 3095 (Nov. 3, 2017).

	<p>Municipalities, water suppliers, and utilities need more detail to estimate local costs of DPR as a water supply option, and to proceed with plans, designs, and construction. ADEQ intends to provide more regulatory specificity and guidance to facilitate the collection and treatment of wastewater to be used for eventual distribution pursuant to the Safe Drinking Water Act (SDWA), and for use in specific pilot or educational projects.</p> <p>During the last rulemaking process, ADEQ and WaterReuse commissioned a technical workgroup report, <i>Recycled Water Workgroup Final Report</i> (Jan. 15, 2018) to inform ADEQ’s DPR implementation framework document.<sup>5</sup> This advisory group will build on the work started in that report.</p>
<p><b>Objective</b></p>	<p>The TAG will continue work begun by the workgroup in 2018 (referenced above) to create a more robust DPR rule and program than currently exists in A.A.C. R18-9-E701. The group will provide input on several Subject Matter Topics, including the following:</p> <ol style="list-style-type: none"> <li>1. Cross-cutting laws, including the Safe Drinking Water Act, Aquifer Protection Permit program, and the Clean Water Act.</li> <li>2. Source water characterization, monitoring, and collection and control</li> <li>3. Pathogen controls</li> <li>4. Chemical controls</li> <li>5. Monitoring of conveyances, treatment processes (e.g., critical control points), and product water</li> <li>6. Operation and Maintenance</li> <li>7. Contingency planning</li> <li>8. Managerial, operational, technical, &amp; financial capacity and reporting</li> <li>9. Operator certification</li> <li>10. Terminology</li> <li>11. Water supply issues and options</li> <li>12. Fees</li> <li>13. Funding Sources for drinking and wastewater</li> <li>14. Strategies for public outreach</li> </ol>
<p><b>Major Tasks</b></p>	<p>TAG tasks will include the following:</p> <ul style="list-style-type: none"> <li>• Provide input to ADEQ on how to prioritize issues based on varying stakeholder perspectives</li> <li>• Bring in guest speakers to inform the group and ADEQ on technical and political issues related to DPR</li> <li>• Provide information to the group and guide ADEQ in its decision-making process</li> <li>• Draft analyses as necessary to inform the group and guide ADEQ</li> <li>• Review ADEQ documents and provide constructive feedback and suggested edits</li> </ul>
<p><b>Deliverable</b></p>	<p>Based on ADEQ’s workplan and schedule, the group will provide periodic verbal and written advice to ADEQ regarding ADEQ’s DPR program framework, rules, and guidance.</p>

<sup>5</sup> Available at [https://static.azdeq.gov/wqd/combined\\_workgroup\\_final\\_report.pdf](https://static.azdeq.gov/wqd/combined_workgroup_final_report.pdf) (last visited Dec. 13, 2021).

<b>Member Role</b>	
<b>Volunteers</b>	<ul style="list-style-type: none"> <li>● TAG is a voluntary working group, which will make recommendations to the ADEQ</li> <li>● Neither the group nor individual members will make decisions on behalf of ADEQ</li> </ul>
<b>Behavior</b>	<ul style="list-style-type: none"> <li>● Members are expected to comport themselves in a professional manner at all times (i.e., treat each other with mutual courtesy, respect and dignity)</li> <li>● It is expected that members will actively participate in good faith</li> <li>● If either the ADEQ Water Quality Director or the chair are concerned about the commitment, behavior, or performance of a workgroup member, the two shall consult to determine appropriate corrective action, if any, that may be taken. Such action may require removal and replacement of the member</li> </ul>
<b>Attendance</b>	<ul style="list-style-type: none"> <li>● Members may withdraw at any time</li> <li>● Members represent their affiliations and bring their special expertise to the discussions</li> <li>● Full participation is needed to ensure a variety of viewpoints are voiced</li> <li>● Members who are unable to participate on a consistent basis may be replaced upon consultation between the Director and the Chair</li> </ul>
<b>Responsibilities</b>	
<b>Chair</b>	<p>Karthik Kumarasamy, Principal Engineer, <a href="mailto:kumarasamy.karthik@azdeq.gov">kumarasamy.karthik@azdeq.gov</a>, 602.771.4391</p> <ul style="list-style-type: none"> <li>● Scheduling meetings using a consensus system (e.g., Doodle Poll)</li> <li>● Prepare agendas</li> <li>● Summarize and track action items</li> <li>● Post reports on website</li> <li>● Facilitate meetings</li> <li>● Resolve issues</li> <li>● Select member to take meeting notes</li> <li>● Move the discussion forward to keep the agenda moving forward on time</li> <li>● Ensure that the work group remains productive and encourage participation</li> <li>● Ensure that all sides of an issue are explored, including hidden or unpopular aspects</li> <li>● Assist the advisory group in reaching consensus as much as possible, and articulating issues where consensus is not possible</li> <li>● Report monthly progress to the Director</li> <li>● Ensure that workgroup member deadlines are met</li> </ul>

<b>ADEQ Unit Manager</b>	<p>Matt Ivers, <a href="mailto:ivers.matthew@azdeq.gov">ivers.matthew@azdeq.gov</a>, 602.771.6723  Ground Water Protection General Permits &amp; Water Reuse Unit Manager</p> <ul style="list-style-type: none"> <li>● Provide technical support and resources as needed</li> </ul>
<b>ADEQ Staff and Contractors</b>	<p>Assist the Chair, as needed, with:</p> <ul style="list-style-type: none"> <li>● Facilitating meetings</li> <li>● Providing presentation material</li> <li>● Resolving issues</li> <li>● Research</li> <li>● Participating and engaging in substantive discussion with members</li> <li>● Notes</li> </ul>
<b>Public Information Officer</b>	<p>Caroline Oppleman: <a href="mailto:oppleman.caroline@azdeq.gov">oppleman.caroline@azdeq.gov</a>; 602.540.8072</p> <ul style="list-style-type: none"> <li>● TWG chair and members may refer any media requests to ADEQ’s Public Information Officer</li> <li>● Members contacted by the media or any organization to answer questions or asked to speak at an event will not present themselves as representing ADEQ or the work group in any way</li> <li>● Members may designate a spokesperson other than the Chair for the group for purposes of public meetings and ADEQ management meetings</li> </ul>
<b>Meetings</b>	
<b>Meeting Format</b>	<ul style="list-style-type: none"> <li>● Virtual guided but open discussion on prescribed subjects</li> <li>● ADEQ to provide virtual meeting platform via Google</li> <li>● TAG meetings are working meetings and will not include an open call to the public (i.e., they are not subject to open meeting law)</li> <li>● Meeting dates and virtual meeting links will be shared only with work group members and approved guest speakers</li> <li>● TAG agendas and meeting notes will be posted on the ADEQ website</li> </ul> <p><i>NOTE: Stakeholder meetings will be held periodically to provide non-members an opportunity to provide input</i></p>
<b>Meeting Schedule</b>	<p>In consultation with workgroup members, the Chair will establish a meeting schedule sufficient to complete the objectives by the stated deadlines (Workplan is TBD). The TAG will begin meeting at end of Q1 2022 complete tasks by Q1 2025, alignment with ADEQ’s DPR project schedule.</p>
<b>Decision Making</b>	<ul style="list-style-type: none"> <li>● TAG will attempt to operate on a consensus basis</li> <li>● If a consensus cannot be reached, to move forward, a decision will be made by a majority of the members present</li> <li>● Dissenting voters may provide a written or verbal explanation of the reasons for disagreement to be included in the meeting notes</li> </ul>