Summary of the Major Provisions of
California's Direct Potable Reuse Regulations

The Direct Potable Reuse (DPR) regulations adopted unanimously on December 19, 2023 by the State Water Resources Control Board (Water Board) are extremely protective of public health and are among the most rigorous and robust potable reuse regulations and requirements in the nation. Many of the DPR requirements are derived from recommendations contained in Water Board and Expert Panel reports. Below is a summary of some of the major provisions of the regulations, but it is by no means a complete listing of all the requirements. WRCA recommends consulting the text of the regulations for a full understanding of DPR.

New Organizational Structure
Unlike the Indirect Potable Reuse (IPR) regulations, the DPR regulations require the identification of a Direct Potable Reuse Responsible Agency (DiPRRA) who is ultimately responsible for compliance with the regulations. While the DiPRRA must be a *public water system,* a DPR project may include other Partner Agencies such as those providing wastewater collection, wastewater treatment, or other public water systems.

Highest Level Operator Certification Required with 24/7 Staffing
Intensive monitoring and oversight will be required for the operation of DPR projects. Therefore, the regulations require the highest level of drinking water treatment certification (Grade T5) for the chief operator that oversees the DPR treatment train. Furthermore, the chief operator at the advanced treatment facility must hold the highest level of the new Advanced Water Treatment Operator certification (Grade AWT5). The shift operators at the facilities must also obtain at least a Grade 3 certification. Either the chief or shift operator is required to be on-site at all times -- 24/7, unless in the future it can be demonstrated that an equivalent degree of operational oversight and reliability can be maintained with less than 24/7 staffing.

Enhanced Source Control Required, Including Constituents of Emerging Concern (CECs)
The DPR regulations include the development of a robust source control program that expands beyond the requirements for IPR. The new requirements include the establishment of a monitoring program to provide early warning of potential issues, establishment of a source control committee, establishment of a community outbreak surveillance program, and an expansion of the local limits program to identify and limit contaminants in wastewater. (*Note WRCA has asked the Water Board to develop a Water Board Expert Panel that will identify CECs and threshold levels for DPR projects. Until that time DiPRRAs will monitor for CECs.*)

Rigorous Chemical Control
The regulations build on the robust IPR treatment train by including two new additional barriers for DPR: ozone and biologically activated carbon (O3/BAC). Coupled with reverse osmosis (RO) and advanced oxidation, these new treatment barriers provide further protection against toxic chemicals. These pre-treatment processes must occur before the reserve osmosis step of the purification process unless it can be demonstrated to the Water Board and an Independent Advisory Expert Panel that an alternative purification step is as protective of public health as O3/BAC. The DPR regulations include monitoring and water quality sampling for chemical control and CECs at several steps in the process as well as operational triggers if minimum levels of treatment are not achieved.

Rigorous Pathogen Control
The DPR regulations include the water industry's strictest requirements for pathogen reduction. The pathogen reduction requirements, which are expressed in terms of "log removal," greatly exceed the already projective IPR requirements and include continuous monitoring and operational triggers to divert the water if pathogen reduction drops below acceptable levels.

Conclusion
The California DPR regulations ensure that the final DPR water meets or exceeds all drinking water standards and contain stringent regulations for emerging contaminants. Please see the text of the California DPR regulations for more details.