



THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA



**LOS ANGELES COUNTY  
SANITATION DISTRICTS**

*Converting Waste Into Resources*

September 8, 2023

**Sent via Email: [Commentletters@waterboards.ca.gov](mailto:Commentletters@waterboards.ca.gov)**

E. Joaquin Esquivel, Chair  
State Water Resources Control Board  
1001 I Street, 24<sup>th</sup> Floor  
Sacramento, CA 95814  
Attention: Ms. Courtney Tyler, Clerk to the Board

Dear Chair Esquivel:

**Subject: Comments – SBDDW-23-001: Proposed DPR Regulations**

The Metropolitan Water District of Southern California (Metropolitan) and Los Angeles County Sanitation Districts (LACSD) appreciate the opportunity to comment on the State Water Resources Control Board's (State Water Board's) proposed Direct Potable Reuse (DPR) Regulations. The proposed regulations would establish uniform water recycling criteria, allowing agencies to plan DPR projects. Metropolitan and LACSD support water recycling, including new opportunities offered through DPR, to help improve regional self-reliance and meet future water supply needs. Metropolitan supplies safe and reliable water to 26 member agencies, serving nearly 19 million residents in more than 300 cities and unincorporated areas throughout southern California. LACSD is a confederation of 24 independent special districts that provide for the wastewater and solid waste management needs of approximately 5.5 million people in 78 cities and unincorporated areas of Los Angeles County.

In partnership, Metropolitan and LACSD are pursuing Pure Water Southern California (PWSC), a program that will produce up to 150 million gallons per day (MGD) of purified water at an advanced water purification (AWP) facility to be located within LACSD's Joint Water Pollution Control Plant (JWPCP) in Carson, California. The purified water, in accordance with indirect potable reuse (IPR) requirements, will be transported via new conveyance systems to recharge groundwater basins in Los Angeles and Orange counties through spreading facilities and injection wells. Metropolitan is also incorporating DPR as part of PWSC through raw water augmentation, which would involve conveying the purified water to existing Metropolitan owned and operated drinking water treatment plants, where it would be blended with surface water supplies. A conceptual layout of the PWSC facilities is shown in Attachment I. Metropolitan and LACSD have been engaged with the State Water Board's Division of Drinking Water, as well as the Los Angeles and Santa Ana Regional Water Quality Control Boards, on the development of PWSC since 2016.

PWSC is being developed to convey purified water from an AWP facility (or multiple facilities) to Metropolitan's F.E. Weymouth Water Treatment Plant in La Verne and Robert B. Diemer Water Treatment Plant in Yorba Linda. Both of these treatment plants, each with a permitted

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capacity of 520 MGD, have a long operating history of compliance with surface water treatment regulations. At these facilities, the purified water would be blended with raw water originating from the State Water Project and/or the Colorado River Aqueduct and undergo additional treatment before entry into Metropolitan's treated drinking water distribution system. The introduction of advanced treated water to these two treatment plants would augment a significant portion of Metropolitan's distribution system, enhancing water supply reliability for the southern California region. PWSC is unique with both IPR and DPR components, which allow for significant operational flexibility and multiple barriers to safeguard public health.

Metropolitan and LACSD provided comments on the first and second editions of the Framework for Regulating Direct Potable Reuse in California and the early draft of the DPR criteria that were released in April 2018, August 2019, and June 2021, respectively. We commend the State Water Board staff for addressing several industry-wide concerns related to environmental buffers and total organic carbon (TOC) monitoring frequency. Metropolitan and LACSD appreciate and support the State Water Board's efforts to take bold steps to advance potable reuse in California through these proposed regulations and offer the following comments. We also appreciate the leadership of WateReuse California and support their comments submitted to the State Water Board that will help to ensure the DPR regulations are fully implementable while protecting public health. In addition to the comments provided subsequently in this letter, a matrix of supplemental comments and recommended changes to specific sections of the proposed DPR regulations are provided in Attachment II, and comments on the Initial Statement of Reasons are included in Attachment III.

**1. Provide an "Alternative" section that allows for flexibility in treatment, monitoring, and compliance for diverse DPR projects**

Section 64669.50 of the proposed DPR regulations allows agencies to pursue alternative treatment as part of a project's chemical control strategy. While Metropolitan appreciates the flexibility in the chemical control section, adding a broader "Alternative" section to the proposed DPR regulations is crucial to address the intricate and evolving landscape of water management in southern California. As DPR projects continue to grow in response to a changing climate and diminishing supplies, it is important to recognize that an inflexible approach is not appropriate. Introducing an "Alternative" section will allow bounded flexibility, if approved by DDW, in treatment, monitoring, and compliance and will be essential for DPR projects with varying configurations and characteristics. For example, Section 64669.20 of the proposed DPR regulations outlines monitoring and notification requirements for the direct potable reuse responsible agency (DiPRRA) and associated partner agencies. Additional flexibility in the Joint Plan monitoring and notification requirements is needed for a DPR project that incorporates multiple sources of wastewater, as described in detail in comment #4. Introducing an alternative clause within the regulatory framework allows exploring innovative solutions that uphold regulatory objectives.

Flexibility in DPR regulations is paramount for various intertwined reasons. First, the inclusion of flexible provisions accommodates emerging technologies, scientific discoveries, and dynamic environmental conditions. For example, over the last four decades, the evolution of treatment

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methodologies has transitioned sequentially from reverse osmosis (RO) to the incorporation of high-intensity ultraviolet light (UV) and subsequently to the UV/Advanced Oxidation Process. Recent shifts in the treatment paradigm underscore significant public health implications. One notable transition is the substitution of UV/hydrochloric acid in lieu of UV/hydrogen peroxide (UV/H<sub>2</sub>O<sub>2</sub>). Additionally, the assimilation of ozone-biological activated carbon has been identified as effective for pathogenic and chemical control. Based on this trajectory, it is clear that continuous experiential learning in potable reuse must be incentivized to continue to ensure that innovation can occur while meeting public health protections. Today's most effective and efficient treatment methods could very well become outdated or be outperformed by the innovations of tomorrow. For example, as currently written, Section 64669.45(a)(3) of the proposed DPR regulation requires that three diverse pathogen treatment mechanisms be utilized, each validated for no less than 1.0 log reduction for each of the three pathogens. The three mechanisms are specifically identified, with no provision included for alternative mechanisms.

As currently proposed, the DPR regulations involve real-time monitoring and control. An "Alternative" section can pave the way for adopting sophisticated real-time monitoring technologies and protocols that do not adhere to the regulatory requirements as written but may ultimately provide a higher level of public health protection. DPR projects should leverage the latest technologies without being held back by outdated regulatory stipulations. Also, when utilities and agencies have the latitude to explore alternative treatments, monitoring techniques, and compliance measures, it can encourage more research and development in the field. This can lead to breakthroughs that enhance DPR safety and efficiency.

Second, a lack of flexibility in standards can often lead to overdesign or excessive treatment, monitoring, or other compliance requirements for systems with lower risks. DPR projects can be tailored to achieve optimal efficiency (with respect to economics, energy, or other resources) by allowing flexibility and ensuring that funds are utilized where they are most needed without compromising safety. Moreover, different DPR projects have unique challenges based on geography, technology, source water quality, and community needs- and this heterogeneity requires adaptable strategies. An "Alternative" section would allow utilities to address these challenges with targeted solutions instead of being confined by rigid, blanket standards.

Third, as climate change impacts water sources, there will be changes in raw water quality, availability, and other environmental factors that will require new solutions to ensure the safety and reliability of water treatment and delivery. An "Alternative" section can offer the necessary agility to adapt to these unpredictable shifts.

Fourth, there has been extensive development in potable reuse worldwide. Future DPR projects may develop unique and efficient methods of treatment, monitoring, and compliance that could apply to California. An "Alternative" section can allow local projects to incorporate and harmonize with international best practices, thereby elevating the global standard for DPR. Flexibility in the DPR regulations will ensure that projects remain resilient and efficient, responding to changing scenarios and new advancements. Moreover, DDW will retain full authority to approve or disapprove project proposals to modify any aspect of the regulations.

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In conclusion, to drive the future of DPR in a safe, economically efficient, and adaptable way, Metropolitan and LACSD strongly recommend including a broad “Alternative” section in the DPR regulations that allows projects the flexibility they require while protecting public health and fostering innovation. At a minimum, we recommend the inclusion of an Alternatives clause in the Pathogen Control Section of the regulations, as follows:

**Proposed Change to Regulation:**

Adopt Section 64669.45 (a)(3) as follows:  
§ 64669.45. Pathogen Control

(3) The treatment train shall consist of no less than three diverse treatment mechanisms each for enteric virus, *Giardia lamblia* cyst, and *Cryptosporidium* oocyst. The three treatment mechanisms shall include one membrane physical separation mechanism, one chemical inactivation mechanism, and one UV inactivation mechanism, with each treatment mechanism validated for no less than 1.0 log reduction for each of the three pathogens, enteric virus, *Giardia lamblia* cyst, and *Cryptosporidium* oocyst. ~~Additional Alternative~~ treatment mechanisms may be used substituting for no more than one of the three core treatment mechanisms, and demonstrated to provide equal or greater protection of public health in relation to the targeted pathogen and approved by the State Water Board.

**2. Ensure standardized and validated online monitoring technology is available before imposing mandatory online monitoring requirements**

The proposed DPR regulations emphasize online monitoring for both an early warning system and for each process to receive pathogen reduction credit. We strongly support the need for online monitoring and associated technological improvements for DPR project development. While online monitoring systems have evolved and are becoming commercially available, their application remains in its infancy, especially for chemical peak monitoring.

Online monitoring tools are available for traditional water treatment processes. However, DPR demands a much higher level of precision and sensitivity. The technology must be capable of detecting a broader range of contaminants at much lower concentrations in real time, capabilities that current systems are not sufficiently mature enough to achieve. For example, the Surface Water Treatment Rule allows the use of turbidimeters for compliance data, establishing calibration requirements. Section 64669.50 of the proposed DPR regulations, however, requires at least one surrogate or operational parameter to be continuously monitored for 1.0-log removal of carbamazepine, sulfamethoxazole, formaldehyde, and acetone. Achieving this may be challenging, as online TOC and turbidity monitoring methods may not have the sensitivity to reflect the spikes of these chemicals at parts per trillion (ppt) or even parts per billion (ppb) levels.

Metropolitan and LACSD urge the State Water Board to spearhead an online instrumentation needs evaluation and ensure that standardized and validated online monitoring technology is available before imposing mandatory monitoring requirements. In the absence of a standardized and validated online monitoring technology, the State Water Board could add provisions to the

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proposed DPR regulations to allow for alternate monitoring techniques. We recommend that the State Water Board collaborate with the regulated community, trade associations, and manufacturers to expedite technological advancements to enhance the reliability and availability of online monitoring equipment for compliance purposes. As California continues to pioneer and champion DPR projects, advancing monitoring strategies will be pivotal for operational reliability and public trust.

### **3. Establish a Science Advisory Panel to create a standardized monitoring framework for constituents of emerging concern in DPR**

Section 64669.65(g) and (h) of the proposed DPR regulations require agencies to identify and monitor for constituents of emerging concern (CEC) and update the list annually. Furthermore, Section 64669.75(c)(2)(A) and (B) includes a source water characterization in the project's engineering report, requiring agencies to identify public health thresholds for CECs for comparison to municipal wastewater concentrations. While monitoring for emerging contaminants is essential in recycled water, the proposed requirements are beyond the scope of most agencies' expertise and will also cause variability in CEC monitoring programs. Such variability will lead to uncertainties in consistently assessing risks linked to CECs across different projects.

Comprising a vast array of substances like pharmaceuticals, personal care products, and other novel contaminants, CECs present unique challenges. The industry's understanding of their occurrence, characteristics, health impacts, and behavior in water systems continuously evolves with fresh scientific insights. Standardization of the CEC monitoring approach is vital across all DPR projects to consistently incorporate new scientific research findings. A uniform methodology also ensures that source water characterizations and risk assessments are consistent across diverse projects, strengthening public trust in the safety of DPR and streamlining regulatory compliance.

Given the technical intricacies and the ever-evolving nature of CECs in the context of DPR, it is imperative that the State Water Board establish a Science Advisory Panel (SAP). A dedicated SAP would leverage the collective expertise of professionals adept in the dynamics of CECs, ensuring DPR projects align with the best science and public health information. This panel would be invaluable in formulating comprehensive monitoring recommendations, integrating the latest scientific developments, and ensuring robust stakeholder engagement. Regular assessments of new technologies, global best practices, and scientific literature by the SAP would ensure that the CEC monitoring framework remains state-of-the-art.

Therefore, Metropolitan and LACSD recommend that the State Water Board establish a Science Advisory Panel. Furthermore, we support the requested changes to Sections 64669.65 and 64669.75 of the proposed DPR regulations in the comment letter submitted by WateReuse California: the regulations should indicate that the State Water Board's scientific advisory bodies should be the primary source of information for DPR projects to develop monitoring lists and public health thresholds for CECs. This would maximize the benefit of a future SAP on CECs for DPR projects, so their findings could be used to satisfy these requirements.

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**4. Accommodate for a Joint Plan organizational structure that supports a variety of partnerships, particularly for large regional projects**

In the proposed DPR regulations, the Joint Plan appears to have been conceptualized based on a relatively simple project consisting of one wastewater agency and one public water system, or a few agencies of each type. The required structure of the Joint Plan should allow the flexibility of more complex projects with multi-agency water and wastewater systems to facilitate regional implementation of DPR. The State Water Board should consider scenarios where multiple DPR projects utilize common regional conveyance systems to transport recycled water from wastewater treatment plants operated by different agencies. For example, the City of Los Angeles may consider using Metropolitan's proposed PWSC backbone pipeline, which is planned to convey purified water from LACSD's JWPCP to various IPR and DPR users, to transport purified water produced at the City of Los Angeles' Hyperion Water Reclamation Plant. The combined flow may serve many different agencies beyond the existing customers of Metropolitan and City of Los Angeles. Having only a single DiPRRA in this potential project scenario would not be feasible for compliance purposes. The DPR regulations must consider the broad variety of project partnerships that are possible for DPR projects and provide flexibility in governance and compliance structures.

Certain Joint Plan requirements may also be impractical for larger wastewater and water systems with a significant number of contract cities and agencies. As a specific example, Section 64669.20(b) requires all entities that collect municipal wastewater to participate in the Joint Plan as a partner agency. Many, if not most, wastewater agencies receive flows from other upstream entities that own sewer collection systems. These upstream systems are known as satellite collection systems, which are typically owned and/or operated by municipalities (e.g., cities, counties, special districts). A variety of other entities may own sewers that are tributary to the satellite collection systems and regional wastewater collection systems and treatment facilities, including federal facilities, educational campuses (e.g., universities), mobile home parks, and private facilities such as shopping centers.

In general, the regional wastewater agency is responsible for having the authority to adopt and implement a pretreatment program. It is also responsible for implementing the same program for the satellite collection systems and any entities that discharge to the satellite collection systems, as well as direct connections to its collection system. A good example of this is LACSD, one of the largest wastewater agencies in California. JWPCP receives wastewater from LACSD's Joint Outfall System's wastewater collection system comprised of over 1,200 miles of interconnected trunk sewers, which in turn receives flows from upstream satellite collection systems owned by 73 cities, Los Angeles County, and numerous other entities. In accordance with the National Pollutant Discharge Elimination System (NPDES) permit for the JWPCP and the legal authority provided by LACSD's Wastewater Ordinance<sup>1</sup>, LACSD implements a pretreatment program for

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<sup>1</sup> LACSD's Wastewater Ordinance can be accessed at LACSD's website via <https://www.lacsd.org/home/showpublisheddocument/2092/637643639544700000>.

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the entirety of the collection system tributary to the treatment plant, regardless of the entity that owns the upstream sewer.

Because of the plethora of entities involved in wastewater collection, requiring each entity to be a partner agency and adopt the Joint Plan would create an unwieldy and unworkable organizational structure and would unnecessarily complicate the DPR project, with no value added to the project. While we are unsure if the inclusion of every collection system entity as a partner agency is the intent of the language in the proposed DPR regulations, for clarity, we propose that for instances where a wastewater agency has authority and control over wastewater connections and wastewater source control throughout the system, that this entity be the sole partner agency that participates in the Joint Plan on behalf of all the wastewater collection system entities. Proposed language to clarify this point is provided below.

**Proposed Change to Regulation:**

Adopt Section 64669.20 as follows:  
§ 64669.20. Joint Plan.

(b) Entities that collect the municipal wastewater, provide municipal wastewater to the DPR project, provide wastewater source control, provide treatment pursuant to the requirements of this Article, or use DPR project water as a source of supply for a water treatment plant that delivers water to a water distribution system of a public water system shall participate in the joint plan as a partner agency; notwithstanding that, if a wastewater agency that is the designated pretreatment entity with authority over wastewater connections and wastewater source control is participating in the Joint Plan as a partner agency, then the associated upstream wastewater collection systems are not required to participate in the Joint Plan as partner agencies.

In addition to this specific requested change, Metropolitan and LACSD recommend that the State Water Board consider incorporating additional flexibility in the Joint Plan to address the optimal organizational structure on a project-by-project basis for more intricate or unanticipated DPR implementation scenarios.

**5. Revise certain monitoring and reporting provisions to ensure requirements are reasonable and feasible**

As currently proposed, Metropolitan and LACSD have concerns about specific monitoring and reporting requirements that may be impractical to implement or may result in resource-intensive efforts that are not necessary to protect public health.

Section 64669.65(e) includes procedures for responding to monitoring results if a constituent with a notification level (NL) is detected. These requirements apply to municipal wastewater, advanced treated water, and finished water samples, and include increased monitoring, initiation of a source control investigation, an evaluation of the treatment system, and submission of a report to the State Water Board. According to the overview of NLs published by the State Water

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Board,<sup>2</sup> “notification levels indicate concentrations of unregulated contaminants in drinking water that are considered to pose no adverse health risk.” As such, there is no basis for requiring any action in response to monitoring results that do not exceed an NL. If a constituent with an NL is detected, but the NL is not exceeded, then by definition there is no adverse health risk present. These provisions, as written, will result in resource-intensive efforts that have no demonstrable public health benefit. Thus, these requirements should be revised to apply only when NLs are exceeded.

Furthermore, for pollutants that have been investigated and the DiPRRA has demonstrated an understanding of the source(s) and control measures are in place to ensure that NLs are not exceeded, repeated investigations should not be required. For example, based on the results of demonstration testing to support the PWSC program, boron is expected to be routinely detected below the NL in the demonstration facility product water samples because it is not fully rejected by the RO treatment process. The results of demonstration testing, source investigation, and monitoring efforts indicate that exceedances of the boron NL are not expected to occur when the full-scale PWSC program is implemented. Because boron is not present at levels that pose an adverse health risk and has already been investigated, no further action should be required by the DiPRRA.

More significant concerns are posed by the applicability of these requirements to municipal wastewater samples. Although it may be reasonable to require follow-up actions for new or unexpected results, certain constituents with NLs may be routinely detected in the municipal wastewater but are removed through the advanced treatment process or reduced to below the NL. If the advanced treatment process can be demonstrated to treat these compounds effectively, it is not reasonable to require additional investigations and actions when they are detected in municipal wastewater samples. Resource-intensive follow-up efforts would not be appropriate in these cases and would not provide a public health benefit. For example, vanadium is consistently detected in the effluent produced by JWPCP, which would be the municipal wastewater supply for the PWSC program, at approximately 2 µg/L compared to the NL of 50 µg/L. Vanadium has not been detected in any demonstration facility product water samples. As levels in the municipal wastewater are far below the NL, and levels are reduced to below detection through advanced treatment, it would not be an appropriate use of resources to conduct additional sampling, a source investigation, or further treatment evaluation for vanadium as required by the proposed DPR regulations. Proposed edits to the text to clarify this point are provided below.

**Proposed Change to Regulation:**

Adopt Section 64669.65 as follows:

§ 64669.65. Additional Chemical Monitoring.

(e) If monitoring at a location identified in subsection (a) shows that a chemical with a notification level is exceeded ~~detected~~, a confirmation sample shall be collected within 24 hours of notification of the result and analyzed for the chemical to confirm the initial

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<sup>2</sup> State Water Board, Division of Drinking Water, November 2022. *Drinking Water Notification Levels and Response Levels, an Overview*.



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result. If the average of the initial and confirmation sample confirms the chemical exceeds the notification level ~~is detected~~, or if no confirmation sample is collected, the DiPRRA shall increase the monitoring frequency of the chemical to weekly, conduct an evaluation of the treatment system, initiate a source control investigation pursuant to the approved joint plan, and include the results in the monthly compliance report submitted pursuant to section 64669.95, unless the chemical has already been investigated and a report summarizing the treatment evaluation and source control investigation was previously submitted to the State Board. The DiPRRA may submit to the State Board a request to resume monthly sampling pursuant to subsection (a) after providing a report summarizing the treatment evaluation and source control investigation to the State Board.

Similar concerns apply to section 64669.60(h), which requires follow-up monitoring and investigation in response to exceedances of MCLs in the municipal wastewater, when those compounds are addressed through advanced treatment. Additional specific text edits regarding these issues are provided in Attachment II.

Section 64669.95(b) requires the submission of analytical results by the 10<sup>th</sup> day of the month following sample collection. Due to the time required for analysis of certain constituents, this deadline may not be feasible. For example, analysis of Radium 226 + 228 can take up to 30 days to complete due to extensive preparation procedures and required ingrowth or decay periods involved in analysis. Furthermore, appropriate time is required to properly collect and ship samples, and for laboratory reports to be reviewed to ensure quality data. Typically, one to two weeks are required to collect, prepare, and ship samples (including shipping times). Following analysis, two to four days are required for data review and database entry. Development of compliance reports then requires additional time. Delays in receiving data from contract labs are also common. The DiPRRA and partner agencies participating in monitoring may not be able to comply with this deadline consistently. The deadline should be revised to the last day of the month following sample collection and should allow flexibility for permit writers to determine the appropriate reporting deadlines for particular projects or particular monitoring results, depending on the circumstances (to be determined in conjunction with the DiPRRA). The State Water Board could also consider an extension of the deadline for lower priority, less critical data, such as municipal wastewater sample results, as opposed to finished water data.

Metropolitan and LACSD thank the State Water Board for the opportunity to comment on the proposed DPR regulations. We believe the additions and clarifications noted in this letter will strengthen the criteria and help expand potable reuse development in California. We look forward to working with the State Water Board and water industry partners to support the development of clear, practical regulatory criteria for DPR that fully protect public health. If you have any questions or need further information, please feel free to contact us at 213-217-7830 or [mchaudhuri@mwdh2o.com](mailto:mchaudhuri@mwdh2o.com), or 562-908-4288 ext. 2502 or [amalik@lacsdc.org](mailto:amalik@lacsdc.org).

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Sincerely,



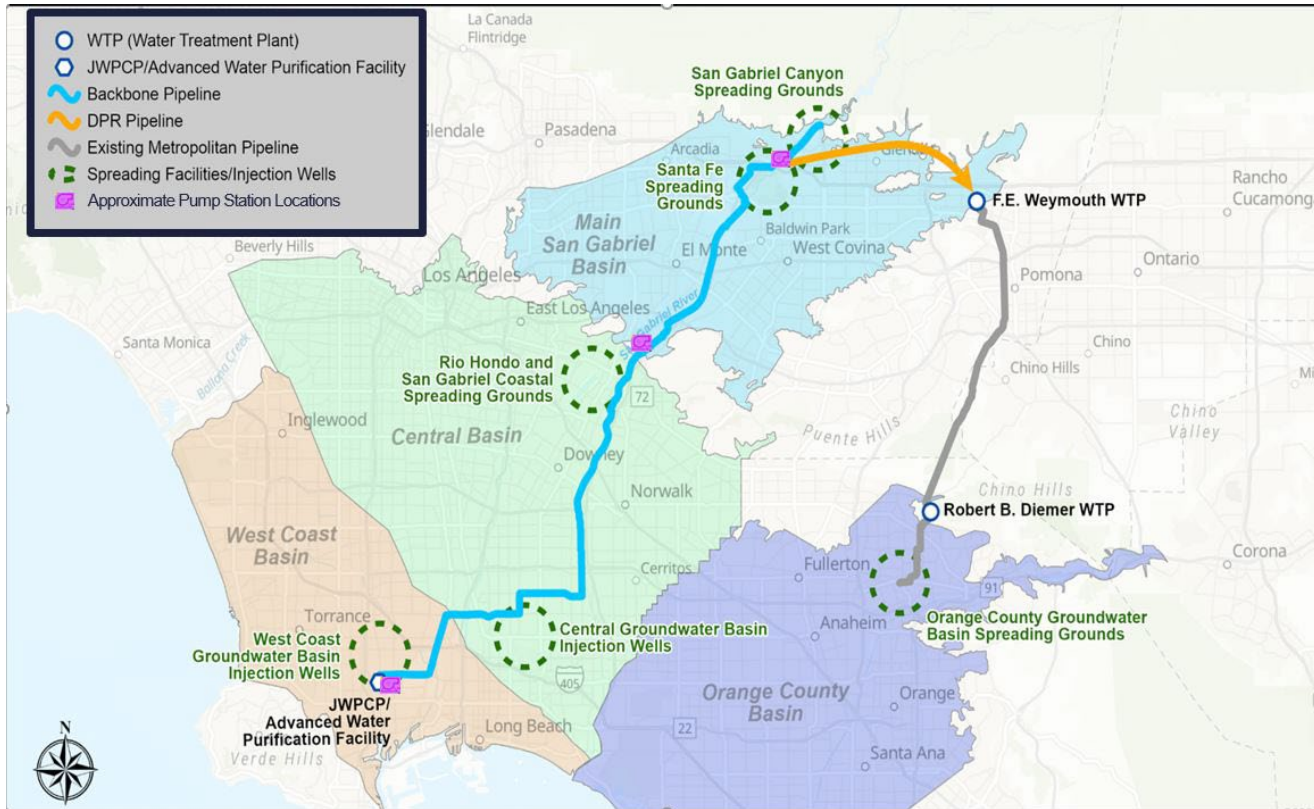
Mickey Chaudhuri  
Group Manager, Water System Operations  
Metropolitan Water District of Southern California

*Mike Sullivan* for AM

Ajay Malik  
Department Head, Technical Services  
Los Angeles County Sanitation Districts

Enclosures (3)

# Attachment I



Conceptual PWSC Facilities Layout for a Potential DPR Scenario

## Attachment II

### Comments on specific sections of Draft DPR regulations:

Section No.	Comment	Suggested Substitute Language (If Any)
<b>64669.05(a)(5)</b>	This section defines “BAC” as biologically activated carbon. The proposed regulations does not describe what BAC entails. We recommend defining the BAC process as defined in AWWA’s Drinking Water Dictionary.	“"BAC" means <u>biologically Granular activated carbon (GAC) used as a treatment medium in which a microbial population is permitted to grow. Commonly used in tandem with ozone pretreatment.</u> "
<b>64669.05(a)(19)</b>	“Municipal wastewater” definition includes a note that "For the purposes of this Article, municipal wastewater is considered a surface water." This statement is overly broad and should be tailored to specify what portions of the Surface Water Rule are applicable to municipal wastewater	"For the purposes of this Article, municipal wastewater <del>is considered a surface water</del> <u>must comply with [list specific requirements] of the Surface Water Treatment Rule.</u> "
<b>64669.20(a)(7)</b>	This section requires a plan to investigate and implement wastewater treatment improvements that would enable a DPR water treatment plant to reduce the level of chemicals to the lowest achievable concentrations. The plan should focus on optimizing feedwater quality for the DPR process as opposed to targeting chemical concentrations in the influent water for the DPR water treatment plant.	"A plan to investigate and implement wastewater treatment improvement that would <del>enable</del> <u>optimize feedwater quality to a water treatment plant that provides treatment pursuant to this Article. to reduce the level of chemicals to lowest achievable concentrations.</u> "
<b>64669.50(g)(1)(C)</b>	This section requires “an influent pH no less than 6.5 and no greater than 8.0”. The influent pH to a RO system may	We recommend changing the language to “An influent pH that corresponds to the manufacturer’s recommended range

Section No.	Comment	Suggested Substitute Language (If Any)
	change based on source water quality and membrane performance. Limiting the pH to a specific range may negatively affect the membrane performance.	or range determined to be optimal based on pilot studies.”
<b>64669.60(a)(1)</b>	This section requires monitoring of municipal wastewater immediately after secondary wastewater treatment and prior to treatment pursuant to section 64669.50. Flexibility to propose a different location should be provided for varying project configurations. For example, some projects may propose an alternative chemical control treatment process that also serves as secondary treatment (e.g., membrane bioreactors).	“Municipal wastewater that feeds the DPR project at a location <del>immediately</del> after secondary wastewater treatment and prior to the treatment processes pursuant to section 64669.50, <u>or at an alternate location approved by the State Board;</u> ”
<b>64669.60(h)</b>	If the municipal wastewater exceeds a primary MCL or action level, this section would require weekly sampling, source and treatment investigations, and a report to the State Board. Though this would be a valuable exercise for new or unexpected exceedances, municipal wastewater samples that will be further treated in the DPR treatment train may routinely exceed certain primary MCLs, such as the draft federal MCLs for PFAS, but these constituents would be reliably removed through the DPR treatment train. The proposed regulations permit a return to monthly monitoring following	“...The DiPRRA may apply to the State Board for written approval to resume monthly sampling pursuant to subsection (a) after submitting the report to the State Board, with approval based on compliance with this subsection. <u>The DiPRRA may request an indefinite return to monthly monitoring if the chemical remains within a certain range of concentrations identified in the report, such that the chemical is reduced to below the MCL through the DPR treatment train.</u> ”

Section No.	Comment	Suggested Substitute Language (If Any)
	<p>submission of an incident report and approval by the State Board, however it is not clear whether this requirement would be continuously triggered by routine exceedances. Clarification should be added to this subsection to allow the State Board to extend its approval to return to monthly monitoring indefinitely, provided that concentrations for the compound remain within the typical range. A waiver similar to subsection 64669.65(e)(1) could also be considered. Adding this clarification would avoid resource intensive additional monitoring that does not have a public health benefit if these compounds are demonstrably removed through advanced treatment.</p>	
<b>64669.65(a)(1)</b>	<p>This section requires monitoring of municipal wastewater immediately after secondary wastewater treatment and prior to treatment pursuant to section 64669.50. Flexibility to propose a different location should be provided for varying project configurations. For example, some projects may propose an alternative chemical control treatment process that also serves as secondary treatment (e.g., membrane bioreactors).</p>	<p>“municipal wastewater that feeds the DPR project at a location <del>immediately</del> after secondary wastewater treatment and prior to the treatment processes pursuant to section 64669.50, <u>or at an alternate location approved by the State Board;</u>”</p>
<b>64669.65(b)(4)</b>	<p>This section requires the analysis of four specific compounds including N,N-dimethylacetamide. There are no</p>	

Section No.	Comment	Suggested Substitute Language (If Any)
	<p>approved EPA methods for this analyte nor are there any methods developed by consensus standards bodies. Labs will likely develop their own methods to comply with this requirement as allowed in section 64669.70(b)(3)(C) and data for this compound will likely be of varying quality. As in the case of other contaminant monitoring, consistent lab methods are preferred. We request the State Water Board recommends a method/technique that can be used to comply with this requirement</p>	
<p><b>64669.65(e)(1)</b></p>	<p>Subsection (e)(1) allows for a waiver of weekly monitoring in response to municipal wastewater results with detected constituents with NLs. The waiver should allow data collected for the source water characterization in the Engineering Report to be used. The waiver should be based on whether the constituent is within the known concentration range and whether it can be reliably removed through the treatment process and should provide an indefinite off-ramp if concentrations remain within a certain range. In the current draft, it is required to demonstrate that "the source of the chemical has been identified". Source investigations almost never identify the source for 100% of the</p>	<p>“If monitoring at the location in subsection (a)(1) shows <del>a chemical with</del> a notification level is <del>detected</del> <u>exceeded</u> and the DiPRRA has detected the chemical in the last two years of monitoring pursuant to subsection (a), <u>or in monitoring pursuant to the source water characterization in subsection 64669.75 (c)(2)(a)</u>, the DiPRRA may submit to the State Board a request to waive the confirmation and increased sampling requirements pursuant to this subsection, if the DiPRRA demonstrates to the State Board that the <del>detection</del> <u>result</u> is within the known concentration range of the chemical, <u>the chemical is reduced to below the NL in the DPR treatment train, and the source of the</u></p>

Section No.	Comment	Suggested Substitute Language (If Any)
	<p>influent loading of a chemical - we recommend revising this subsection to acknowledge this observation. Additionally, as noted in the comment letter, the requirements in response to detections of constituents with NLs should be revised to apply only when the NL is exceeded.</p>	<p><del>chemical has been identified in previous</del> source control investigations <u>have been conducted.</u></p>
<p><b>64669.65(g) and (h)</b></p>	<p>These sections require a DiPRRA, in consultation with the State Board, to identify a list of chemicals for special monitoring on an annual basis. This is inconsistent with subsection (h)(1), which requires these chemicals to be monitored for no less than two years. It is also not likely that new literature or resources will be available over the course of a single year to make new monitoring recommendations. It is recommended to instead require a plan for special monitoring to be updated every five years with the Engineering Report. However, as noted in the comment letter, a Science Advisory Panel for CECs in DPR projects would be the most appropriate means to identify CECs to monitor and update recommendations periodically.</p>	<p>“(g) <del>Each year</del> <u>Every five years, concurrent with updates to the Engineering Report,</u> a DiPRRA, in consultation with the State Board, shall identify chemicals...”</p> <p>“(h) <del>Each year</del> <u>Every five years, concurrent with updates to the Engineering Report,</u> a DiPRRA shall submit to the State Board a plan for special monitoring...”</p>
<p><b>64669.65(g)(5)</b></p>	<p>This section requires identification of chemicals that may exceed health risk thresholds based on multiple sources including information on most prescribed</p>	<p>Delete subsection.</p>



Section No.	Comment	Suggested Substitute Language (If Any)
	<p>pharmaceuticals, including results from internet sites that track pharmaceutical use. This would require water and wastewater professionals to understand the metabolic fate of these drugs within the human body prior to excretion, which is not within the scope of their expertise. Additionally, internet sites may not be a reliable source of information. Scientific literature on pharmaceuticals in wastewater, required by subsection (g)(4) should be sufficient. However, as noted in the comment letter, a Science Advisory Panel for CECs in DPR projects would be the most appropriate means to identify pharmaceuticals and other unregulated chemicals for DPR projects to monitor.</p>	
<p><b>64669.95(a)(13), (15), and (16)</b></p>	<p>These sections require a summary of source control program activities, cross-connection incidents/ investigations, and a summary of water quality complaints and reports of gastrointestinal illness to be included in monthly compliance reports. These activities are likely to involve investigations or other actions that may take multiple months to complete. Therefore, it is recommended to include these items in the annual report instead of the monthly report.</p>	<p>Delete subsections (a)(13), (15) and (16) from Section 64669.95.</p> <p>Revise Section 64669.100 as follows:</p> <ul style="list-style-type: none"> <li>• “(a)(4) A description of the wastewater source control program <u>activities and</u> performance and any challenges during the previous calendar year, and any proposed program changes:”</li> <li>• Add subsections (a)(15) and (16) from Section 64669.95 to Section 64669.100 as subsections (a)(8) and (9).</li> </ul>

### Attachment III

#### Comments on the Initial Statement of Reasons:

Section/Page No.	Comment
<b>64669.40, Page 29</b>	The discussion of online monitoring for the early warning program references sewershed surveillance and cites wastewater collection system monitoring that has been tested in other countries. LACSD is concerned that nodal collection system monitoring technologies are not robust enough to produce useful data. Subsection (c)(1) does not specify the location for online monitoring for the early warning program. We acknowledge and support the mention of online monitoring in the wastewater treatment plant influent in this section of the Initial Statement of Reasons. However, we request additional clarification be added to the second to last paragraph on page 29 to state that utilities would have flexibility to assess both monitoring technologies and locations (i.e., wastewater treatment plant influent vs. sewershed locations) to select approaches that are the most effective and appropriate. We also request that the mention of a "sewershed surveillance program" be replaced with the term "early warning program" in this paragraph to be consistent with the terminology in the regulations.
<b>64669.65, Page 77</b>	In the discussion of the plan for special monitoring in the second paragraph of page 77, the Initial Statement of Reasons references comments on the early draft requesting the approach for identifying chemicals be limited to chemicals identified by the State Board CEC Expert Panels. This paragraph goes on to state that the plan for special monitoring is intended to have a wider scope than the CEC Expert Panels. Though we acknowledge the CEC Expert Panels were focused on indirect potable reuse and aquatic ecosystems, and that a DPR-specific analysis is needed, we are concerned about the State Board's expectation that project-specific monitoring lists would be expected to be based on a wider scope of consideration of chemicals than the CEC Expert Panels. If a DPR Expert Panel is convened in the future, individual projects should not be expected to conduct an analysis with a wider scope (on an annual basis) than that conducted by a panel of experts specifically dedicated to that purpose.