



October 8, 2019

Mike Markus  
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Orange County Water District  
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Subject: OCWD's Potential Program to Assist Producers with PFOA Treatment

Mike:

On October 9, 2019, the OCWD Water Issues Committee will review a draft policy intended to guide the implementation of a program to assist Groundwater Producers in removing perfluorooctanic acid (PFOA) and perfluorooctane sulfonate (PFOS) from water extracted from the Orange County Groundwater Basin. This proposed program will be an important part of OCWD's efforts to protect water quality in the Basin, for the benefit of all Producers.

Irvine Ranch Water District (IRWD) has reviewed OCWD's draft policy, taking into consideration IRWD's adopted policy position regarding PFAS contaminants, attached as Exhibit "A". The information contained in IRWD's position paper is intended to guide IRWD's efforts related to legislative and regulatory issues and issues of direct interest to IRWD customers. IRWD's policy position is also intended to support OCWD's development of a policy to implement its plan to address the issue of PFOS in the Basin. The purpose of this letter is to convey IRWD's general support of OCWD's potential program to assist the Producers with the treatment of PFOA found in local groundwater and to request the inclusion of the additional comments provided below.

Comments on OCWD Response Program Policy:

IRWD requests that OCWD include the following considerations as it develops its PFOA and PFOS Response Policy and potential program to assist Producers with PFOA treatment:

1. OCWD should identify a viable PFOA and PFOS treatment process that will establish a "lowest reasonable and efficient treatment design" that minimizes costs to the Producers, enables timely cleanup of the Basin and that also considers the ultimate fate of the PFOA and PFOS contaminants;

2. OCWD should not complete final design and construction of treatment facilities until Maximum Contaminant Levels (MCLs) are established or Response Levels (RLs) are significantly reduced from current levels;
3. Producers that will assume title to the treatment facilities, as designed and constructed by OCWD, should bear the financial risk of the over-design of facilities should MCLs be established at levels above RLs for which facilities are constructed (note: such financial risks could be avoided if final design and construction were delayed until MCLs are established);
4. OCWD should consider reimbursing Producers for the construction of temporary treatment facilities that meet OCWD's lowest reasonable and efficient treatment design standard and that can be incorporated into a permanent solution acceptable to OCWD;
5. OCWD should also consider taking a support role and reimbursing a Producer for appropriate costs if the Producer chooses to take the lead in developing and constructing a cost-effective treatment system;
6. When considering how much OCWD should subsidize operations and maintenance costs associated with treatment facilities, equity issues (such as capital and operational costs) associated with conveyance facilities that are in use by other Producers to avoid other contaminants in the Basin must be taken into account;
7. Producers should remain responsible for the cost to convey and pump treated groundwater into their distribution systems;
8. Site acquisition, securing right of way, and the development of qualified bidders lists for the construction of the treatment facilities should occur with the participation of the affected Producers;
9. OCWD should pursue avenues to obtain reimbursement for the design, construction, and operation of treatment facilities from the companies that produced PFOA and PFOS; and
10. OCWD should not impair the use of existing BEA-exempt projects that clean up other contaminants from the Basin by raising the BPP.

We hope that the comments provided above will be helpful to OCWD in finalizing its policy to guide the implementation of the proposed program. If you have any questions, please contact me at (949) 453-5590.

Sincerely,



Paul Cook, P.E.  
General Manager

Enclosure

cc: OCWD Board of Directors

IRWD POLICY POSITION REGARDING PFAS CONTAMINANTS

SEPTEMBER 30, 2019

Issue Summary:

The policy issues associated with the cleanup of what are often referred to as “PFAS compounds” in the Orange County Groundwater Basin (Basin), both prior to and after the establishment of regulatory limits in drinking water, are complex and likely to be controversial. To help guide IRWD’s advocacy efforts related legislative and regulatory efforts, as well as issues of concern to IRWD services and the cleanup of PFAS compounds that have been found in the Basin, this paper reflects the policy position adopted by the IRWD Board.

Background on PFAS Contaminants:

In 2012, the United States Environmental Protection Agency (EPA) issued rules which required monitoring for 30 added contaminants by public water systems across the United States. Perfluorooctanic acid (PFOA) and perfluorooctane sulfonate (PFOS) were included on the list for monitoring. These compounds are organic chemicals that are part of a larger group of man-made chemicals referred to as per-and polyfluoroalkyl substances (PFAS). These substances, sometimes referred to as “forever chemicals,” are persistent in the environment while being generally resistant to heat, water, and oil. They have been widely used in consumer products such as carpet, clothing, fabrics for furniture, paper packaging for food, fire-fighting foams, and other materials (e.g., cookware) designed to be water proof, stain-resistant, or non-stick.

Between 2013 and 2015, OCWD tested water from the Basin consistent with EPA requirements. The results of the tests were submitted to the EPA and the State Water Resources Control Board Division of Drinking Water (DDW). In July 2018, DDW established precautionary advisory levels for PFOA and PFOS.

*Precautionary Advisory Levels:*

Notification Levels are precautionary health-based advisory levels established by DDW for chemicals in drinking water that are not regulated by Maximum Contaminant Levels (MCLs). State law requires timely notification to local jurisdictional authorities by a retail water system whenever a Notification Level is exceeded in drinking water. DDW recommends that public water systems take a source of water out of service if a contaminant is present at concentrations considerably higher than the Notification Levels. The level prompting such recommendations is called the “Response Level”.

Notification and Response Levels have no binding effect on a public water system’s ability to serve water to customers. Because of public perception issues associated with continuing to serve water that contains PFOA and PFOS at concentrations above the Response Levels, the thresholds can be interpreted by some entities as “de facto MCLs.”

*Maximum Contaminant Levels:*

MCLs are standards that are set by the EPA and some states for drinking water quality. MCLs serve as legal threshold limits on the amount of a substance that is allowed in a potable water supply. The EPA is moving forward with developing MCLs for PFOA and PFOS. The State of California is expected to soon initiate a parallel process to establish its own enforceable limits.

Until either federal or state MCLs are set for PFOA and PFOS, there are no legal requirements for a public water system to blend, treat or take an affected water source out of production.

Contaminants Could Become a Widespread Problem:

In April 2019, monitoring orders were sent by DDW to public water systems across California including IRWD and 11 other Orange County Groundwater Producers (Producers). In response to the orders, OCWD implemented a sampling and analysis program that identified that PFOA and PFOS contaminants exist in a substantial portion of the Basin.

In August 2019, DDW released new lower Notification Levels and is expected to release lower Response Levels by the end of 2019. These lower Response Levels are expected to influence the decisions of numerous Producers to operate (or to not operate) approximately 71 wells. Additional Producers are at risk that if the contaminants continue to migrate through the Basin. A migration would likely reduce many other Producers' ability to rely on groundwater.

OCWD and Groundwater Basin Considerations:

OCWD has recently initiated pilot studies to evaluate various treatment processes that might be effective at removing PFOA and PFOS from groundwater recovered from the Basin. In addition, OCWD has initiated efforts to study how treatment facilities could be integrated into Producer potable water production distribution systems that are affected by the contaminants. As part of these ongoing efforts, OCWD is expected to develop and implement a policy on how the costs of the design, construction, operation and maintenance (O&M) of treatment facilities might be allocated to OCWD and the affected Producers. In developing its policy, OCWD will need to consider equity issues associated with other contaminants that exist in the Basin that have either been avoided or that are currently being cleaned up from the Basin.

*BEA Exemptions Should Be Considered:*

OCWD District Act gives OCWD the power to enter into a contract with a Groundwater Producer to encourage the Producer to increase production of groundwater in lieu of using imported water for the purpose of removing contaminants from the Basin. The corresponding treatment facilities are commonly referred to as Basin Equity Assessment (BEA) exempt projects. In practice, a Producer that operates such facilities is annually credited pro-rated capital and actual O&M costs associated with the treatment facilities. The credits are used to offset BEA payments owed by the Producer for pumping above the OCWD Basin Production Percentage (BPP). Providing BEA exemptions to PFOA and PFOS treatment projects would not be applicable to Producers that would use such a project to treat groundwater extracted under the BPP. Where Producer agencies have enough well capacity to pump unimpaired water up to the BPP, the implementation of BEA exempt project might be useful for removing PFOA and PFOS from the Basin.

*Raising BPP Should Be Avoided:*

If, in response to DDW Response Levels or future MCLs, the Producers affected by the PFOA and PFOS contaminants choose to take their wells out of service, then OCWD could financially

be affected through reduced Replenishment Assessment (RA) revenue. If OCWD were to increase the BPP in response to these financial impacts, then the Producers that operate BEA-exempt projects would be financially impacted. This is an important issue and OCWD should avoid raising the BPP in response to wells being shut down due to the presence of PFOA and PFOS contaminants.

IRWD Policy Principles:

To help guide IRWD's advocacy efforts related to PFAS contaminants, the following policy position principles have been assembled. These principles provide guidance on issues related to legislative and regulatory action, IRWD services, and the Orange County Groundwater Basin.

*State and Federal Legislative and Regulatory Issues:*

1. Public health and environmental standards should be developed that are based on science and a comprehensive understanding of the risk that PFAS contaminants pose to public health and the environment;
2. State and federal agencies should hold PFAS producers ultimately liable for cleanup costs. Additionally, regulators should ban the importation of PFAS containing products that can result in further environmental contamination;
3. Regulations should focus on the most persistent PFAS compounds that pose the greatest human health risk and sources that produce the highest levels of exposure;
4. Federal MCLs for PFOA and PFOS should be established in a timely manner in accordance with the established regulatory processes under the Safe Drinking Water Act;
5. If PFAS is designated as hazardous substance under CERCLA, then wastewater and water utilities must be exempted from liability because water and wastewater utilities do not produce or create PFAS – they only receive PFAS in the water and wastewater they treat; and
6. Federal financial assistance should be provided through the EPA's Drinking Water State Revolving Fund and other programs to communities that are forced to address contaminated water supplies.
7. The federal government shall take responsibility for PFAS contamination associated with the many active and closed military bases under its jurisdiction.

*IRWD Service Issues:*

1. IRWD elects not to produce water from any source for its potable water system that contains unacceptable levels of PFOA and PFOS unless an effective water treatment system is in place to remove these contaminants;

2. IRWD will look for opportunities to collaborate with other Producer agencies to develop mutually beneficial joint PFOA and PFOS removal facilities; and
3. IRWD will establish a policy position on the impacts of PFAS in recycled water or residual biosolids materials once the regulations for these products are promulgated.

*Orange County Groundwater Basin Issues:*

1. OCWD should establish a policy for the removal of PFOA and PFOS contaminants in the Basin that takes into consideration regulatory recommendations and requirements, equity issues associated with other contaminants in the Basin, protection of the use of BEA-exempt projects to clean up other contaminants, and the need to stop the migration of the contaminants before they impact additional Producers' wells;
2. IRWD supports OCWD treatment pilot studies to evaluate various treatment processes to cost-effectively remove PFOA and PFOS from groundwater recovered from the Basin. Viable treatment systems must consider the ultimate fate of these contaminants rather than shifting them to another environmental media;
3. Until the MCLs are established or the RLs are significantly reduced for PFOA and PFOS, IRWD does not support the final design, construction and operation of treatment facilities that would result in costs being assessed through the RA to the Producers;
4. Once MCLs are established or RLs are significantly reduced for PFOA and PFOS, OCWD should work with Producers to implement BEA-exempt projects where possible to remove the contaminants;
5. Where use of BEA-exempt projects is not possible, OCWD should develop and fund the design, construction and operation of treatment facilities that can be integrated into a Producer's retail water system;
6. Producers affected by the PFOA and PFOS contaminants should pay for a portion if not all the O&M costs associated with the treatment of groundwater delivered through their potable water system. Producers should remain responsible for cost to convey and pump treated groundwater into their distribution systems;
7. OCWD should pursue avenues to obtain reimbursement for the design, construction, and operation of treatment facilities to remove PFAS contaminants from the Basin from the companies that produced PFOA and PFOS;
8. OCWD should support efforts to implement upstream source control including the funding, design, construction, and operation of treatment processes to remove PFOA and PFOS from sewage treatment plant effluent that is discharged upstream into the Santa Ana River where feasible;

9. To ensure that no area of the Basin is unfairly impacted by recharge of Santa Ana River water that has concentrations of PFOA and PFOS, OCWD should strategically balance among its facilities (including the Santiago Basins) the recharge of imported water and water produced from the Groundwater Replenishment System;
10. OCWD should not pay for a Producer's alternative source of imported water. In addition, OCWD should not pay for temporary PFAS treatment and conveyance facilities if a Producer elects to incur these costs, unless the temporary facilities are incorporated into the permanent solution that is acceptable to OCWD; and
11. OCWD should not impair the use of existing BEA-exempt projects that clean up other contaminants from the Basin by raising the BPP.