

IRWD POLICY POSITION REGARDING PFAS CONTAMINANTS

OCTOBER 12, 2020

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. Perfluorooctanoic 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 waterproof, 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 has taken the first step in the MCL development process by requesting that the Office of Environmental Health Hazard Assessment (OEHHA) develop Public Health Goals for PFOA and PFOS. In general, the federal or state MCL process takes at least three years to complete. 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 for PFOA and PFOS, and DDW also requested that OEHHA evaluate seven other PFAS compounds to determine if Notification Levels are appropriate¹. In February 2020, DDW released lower Response Levels, which have impacted the operation of approximately 70 Producer wells. Additional Producers are at risk 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 is conducting 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 is studying how treatment facilities can be integrated into Producer potable water production distribution systems that are affected by the contaminants. As part of these ongoing efforts, OCWD has developed and implemented a policy on how the costs of the design, construction, operation and maintenance (O&M) of treatment facilities will be allocated to OCWD and the affected Producers. Agreements based on this policy have been executed between many of the affected Producers and OCWD. These agreements will facilitate the design, construction and operation of PFAS treatment facilities.

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

¹ Perfluorohexane sulfonic acid (PFHxS), perfluorobutane sulfonic acid (PFBS), perfluorohexanoic acid (PFHxA), perfluoroheptanoic acid (PFHpA), perfluorononanoic acid (PFNA), perfluorodecanoic acid (PFDA), and 4,8-dioxia-3H-perflourononanoic acid (ADONA)

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 above the BPP, the implementation of BEA exempt project might be useful for removing PFOA and PFOS from the Basin.

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. Until such time, IRWD will not use sources of recycled water that increase the concentrations of PFAS in the recycled water produced at MWRP or LAWRP.

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 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; and

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.