

First Public Agency Lab Receives PFOA and PFOS Detection Certification

By Jason Dadakis, P.G., C.HG



ORANGE COUNTY WATER DISTRICT'S (OCWD's) Philip L. Anthony Water Quality Laboratory is the first public agency laboratory in California to achieve state certification to analyze for per- and polyfluoralkly substances (PFAS) in drinking water. The PFAS family of chemicals includes perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) contaminants. Certification was granted by the Environmental Laboratory Accreditation Program (ELAP) administered by the State Water Resources Control Board (SWRCB).

The lab had previously received certification from the U.S. Environmental Protection Agency (USEPA) to test drinking water in accordance with USEPA Method 537 that determines the concentration of selected perfluorinated alkyl acids, such as PFOA and PFOS. This certification was received as part of the USEPA's Unregulated Contaminant Monitoring Rule (UCMR) 3 program, with the OCWD lab being only one of three public agency labs nationally to be certified for all UCMR3 methods.

"Operating the first public agency lab in California to achieve state ELAP certification for Method 537 is the result

of OCWD's commitment to exceptional water quality," stated OCWD President Vicente Sarmiento. "OCWD tests water for over 500 compounds, while only 109 of those compounds are required to be regulated by state and federal law."

PFOA and PFOS compounds were historically used to make carpets, clothing, fabrics for furniture, paper packaging for food and other materials resistant to water, grease or stains, and were also used for firefighting at airfields, and in several industrial processes. In 2006, companies in the U.S. voluntarily agreed to phase out U.S. production of these chemicals by the end of 2015.

Although yet to be federally regulated, in 2016, USEPA issued a provisional health advisory for lifetime exposure to these compounds set at 70 parts per trillion (ppt) for the combined sum of PFOA and PFOS concentrations. In July 2018, California Division of Drinking Water (DDW) established Notification Levels of 14 ppt for PFOA, 13 ppt for PFOS and a combined Response Level of 70 ppt. One part per trillion is like one drop in a volume of water that can fill 26 Olympic-sized swimming pools.

The Method 537 certification is possible because of significant investments OCWD made to improve the sensitivity of OCWD's lab equipment to look for contaminants of emerging concern.



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