STATE WATER RESOURCES CONTROL BOARD
BOARD MEETING SESSION – DIVISION OF WATER QUALITY
APRIL 5, 2022

ITEM 5

SUBJECT

PER- AND POLYFLOUROALKYL SUBSTANCES (PFAS) STATEWIDE INVESTIGATION UPDATE

DISCUSSION

Water Board staff will provide an update on the occurrence data collected and analyzed as part of the statewide per- and polyflouroalkyl substances (PFAS) investigations, which now includes data for PFAS chemicals from nearly 1,000 investigation orders issued to airports, landfills, chrome platers, publicly-owned treatment works, bulk fuel terminals, and refineries, along with nearly 1,200 orders issued to public water systems.

PFAS are a group of man-made chemicals resistant to heat, water, and oil that are used in many industrial and consumer applications. Manufacturing of PFAS started in the 1950s and a majority of the chemicals are still in use today in products such as carpets, rugs, water-proof clothing, upholstery, food paper wrappings, non-stick products, cleaning products, fire-fighting foams, and metal plating (e.g., cookware). These chemicals are persistent and are characterized by being resistant to environmental degradation, long half-lives, and some accumulate in the human body and in food chains.

CalEPA agencies, the California legislature, and others have initiated efforts to eliminate PFAS impacting our environment from our consumer products and in some industrial applications. For example in California, PFAS-containing carpets and rugs are banned, PFAS-containing fire-fighting foam is being phased out, and intentionally added PFAS exceeding 100 parts per million of total fluorine is not allowed in food service packaging provided on state-owned property. But the persistence of PFAS along with the ability to only reliably test for a small fraction of the estimated 5,000 or more PFAS chemicals and other unknowns, such as, limited toxicity data, fate and transport properties, and treatment solutions, requires continued investigation and the development of effective intervention and management strategies.

The Water Boards began a statewide PFAS response and investigation in July 2018 with the issuance of a drinking water notification level for perfluorooctane carboxylate (PFOA) and perfluorooctane sulfonate (PFOS), the two most studied PFAS chemicals. In March 2019, Water Boards staff continued a strategic investigative approach to characterize the impacts and sources of PFAS to public water supplies and the environment. The Water Boards issued orders to require monitoring of 25 to 38 PFAS chemicals in likely source areas (e.g., fire-fighting foams at airports, bulk fuel terminals, and refineries, and the use of PFAS products in industrial processes, such as chrome

plating) and those facilities receiving PFAS-containing waste materials (e.g., disposal of consumer products at landfills and industrial wastewaters at publicly-owned treatment works). Monitoring orders were also sent to public water systems to sample source wells located adjacent to the airports and landfills, and public water systems with prior Federal EPA Unregulated Contaminant Rule Program 3 (UCMR3) PFAS detections. Those monitoring orders were expanded to include public water supply wells located around the initial set of wells that reported PFAS detections in 2020 and wells located near Department of Defense installations in 2021. The set of PFAS occurrence data resulting from these Orders now exceeds 8,400 drinking water and 5,700 non-drinking water samples. This information is crucial to further our understanding of the impact of PFAS to human health and California's water quality and watersheds.

Water Board staff are continuously reviewing and analyzing the data and will provide the State Water Board a summary of the findings from the ongoing statewide PFAS investigations. Staff will present on how this information and other studies may inform different approaches for ongoing PFAS investigations. Staff will also provide next steps to fill in critical data gaps, such as investigating PFAS in surface water sources used for drinking water. There are still challenges ahead but the PFAS program is assimilating the information from these statewide investigations and moving into a phase of developing management, monitoring, and treatment strategies for PFAS.

POLICY ISSUE

None.

FISCAL IMPACT

None.

REGIONAL BOARD IMPACT

None.

STAFF RECOMMENDATION

None, this is an informational item.