



What are PFAS?

PFAS— stands for perfluoroalkyl and polyfluoroalkyl substances, which is a group of chemicals, comprised of over 4,000 individual compounds. Two well-known regulated PFAS compounds are perfluorooctanesulfonate (PFOS) and perfluorooctanoic acid (PFOA). They are persistent in the environment, so are often referred to as “forever chemicals,” and can accumulate in the human body.



Where are they found?

For decades, a number of these compounds were used in a wide range of industrial, emergency response, and consumer applications and processes like material coating, vapor suppression, firefighting, and waterproofing. Because of their heat, water, and oil resistance, they were also used in cookware and food storage/packaging products, and to provide stain protection and fire retardancy in apparel, carpeting, and upholstery.



Why are they a concern?

PFAS are considered an “emerging contaminant,” because the level of research into the health effects for these compounds is not as advanced as with many other environmental contaminants. Research to date suggests that exposure to PFAS may pose a number of potential health risks and at lower concentrations relative to many other chemicals. PFAS are commonly identified as contaminants in soil, groundwater, and surface water, and because of their chemical properties can migrate significant distances from locations where they were originally released.

How can PM assist you with PFAS?

PM Environmental is experienced with investigating and assessing environmental risk at sites contaminated with PFAS compounds. PM designs wastewater treatment systems, prepares treatment system operation and maintenance protocols, and completes onsite training to ensure that clients can operate their PFAS treatment effectively. PM also provides stormwater compliance, discharge evaluation, and source identification assessments to assist clients with their regulatory compliance needs.



Is there an EPA Advisory?

The EPA issued a Lifetime Health Advisory for combined PFOA/PFOS concentrations above 70 ppt, which applies to ingestion exposures. For reference, one part per trillion (ppt) is equal to one drop of water in the combined volume of 20 Olympic swimming pools.



Are they still in use today?

Though PFOA is no longer manufactured in the US, and PFOS was voluntarily phased out, both are currently produced in Italy, China, and Germany and could still be in imported goods. Additionally, a large number of PFAS compounds remain in use, and as with PFOA and PFOS, are commonly found in commercial and industrial solid/liquid waste and waste water streams.



What are the health risks?

Some of the potential health risks include hypertension during pregnancy, low infant birth weights, increased blood cholesterol, and a higher risk of developing conditions as wide-ranging as liver disease, thyroid disease, asthma, and possibly infertility.