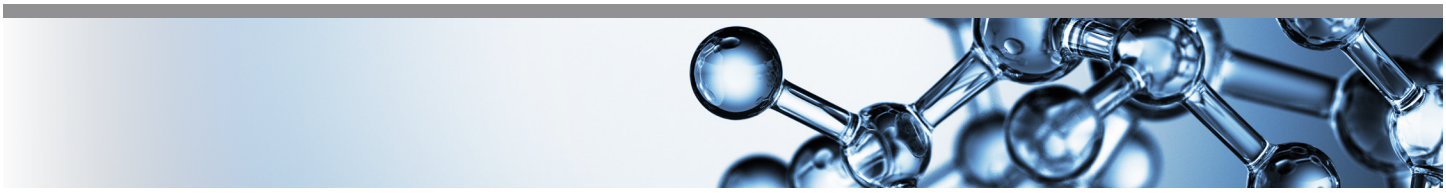
The Facts on PFAS



What are PFAS?

Per- and polyfluoroalkyl substances (PFAS) are a group of synthetic fluorinated compounds which have been used in a variety of commercial and industrial applications. PFAS have been in commercial use since the 1940s and are abundant in today's society. These chemicals are in widespread use because of their exceptional resistance to heat, water, and oil, including their use in fire-fighting foams and many water-repellent applications.

PFAS are commonly found in most every American household, and in products as diverse as non-stick cookware, stain resistant furniture and carpets, wrinkle free and water-repellent clothing, cosmetics, lubricants, paint, pizza boxes, popcorn bags, and many other everyday products. Studies have shown that greater than 99% of adults in the US have detectable concentrations of PFAS in their blood, due to their exposures to these everyday products. There is some positive news, however, as the concentrations of two primary PFAS (PFOS & PFOA) in human blood serum have dropped significantly (> 85% and >65% respectively) in the past 15 years.

What are the roles of waste management facilities in regards to PFAS?

PFAS "producers" and PFAS "receivers" are not one and the same. Wastewater treatment facilities and municipal solid waste landfills are not producers or users of PFAS, and none of these essential public service providers utilize or profit from PFAS chemicals. Rather, they are receivers of these chemicals used by businesses and everyday consumers, and merely convey and/or manage the traces of PFAS coming into their systems.

As a provider of sustainable waste management solutions, Casella has been a leader in addressing the management of PFAS compounds as emerging contaminants over the last several years. In each of the states where Casella operates solid waste management facilities, it has been working with state regulators and other stakeholders to better understand the presence of PFAS compounds in wastewater and solid waste. Research and testing of solid waste streams indicate that nearly all residential and commercial wastes contain PFAS, especially in the carpets, fabrics, and food packaging that consumers dispose on a daily basis. Casella solid waste disposal facilities are safely and effectively managing these incoming PFAS-containing wastes, with greater than 90% of the PFAS mass safely sequestered in the landfills. Landfill leachate containing PFAS is then properly collected, stored and disposed to meet regulatory standards and protect human health and the environment. PFAS compounds have been consistently identified in residential septic systems, in wastewater treatment facilities regardless of whether landfill leachate is present, and in soil and groundwater associated with manufacturing facilities, airports, military bases, and fire training centers.

What can be done?

Due to the continued widespread use of PFAS in consumer products, PFAS-containing wastes will need to be effectively managed for decades to come. As a society, the most significant action we need to take today is to remove these chemicals of concern from our stream of commerce. Domestic and foreign manufacturers need to discontinue and phase out production and use of PFAS in their products. The use of fire-fighting foam containing PFAS should be discontinued and only viable and safer alternatives should be used. Consumers need to seek to purchase PFAS-free products, and limit the disposal of existing PFAS-containing products. However, as long as PFAS continue to be present in the products used in our everyday lives, landfills, wastewater treatment facilities, and other waste management facilities will need to continue to provide effective, sustainable management solutions for these materials.