

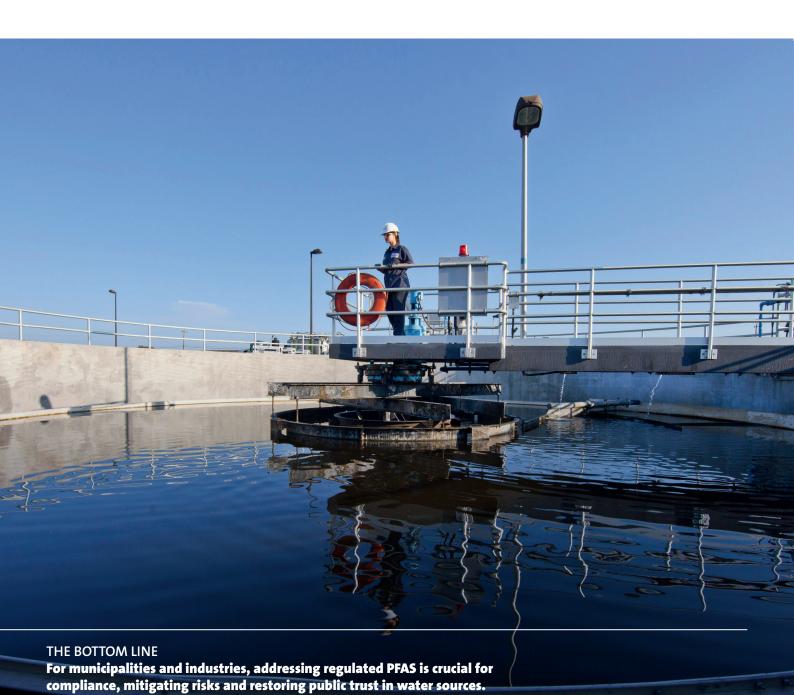
**End-to-end PFAS treatment and management solutions**for a safer, cleaner future



# PFAS: A global concern

PFAS (per- and polyfluoroalkyl substances) are found everywhere in our environment. Some of them are a pressing environmental and public health concern, impacting drinking water supplies, ecosystems and communities globally.

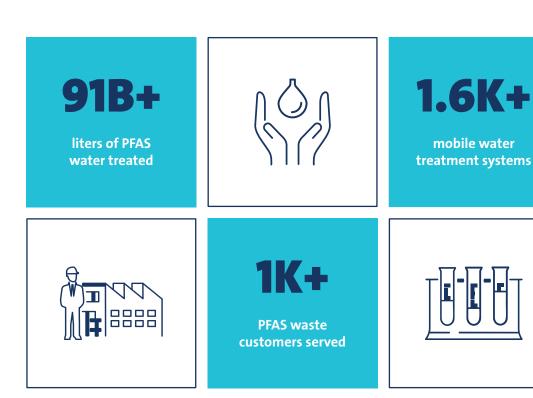
Whether in water, soil, waste or solids, these compounds pose significant challenges, from widespread contamination to complex treatment requirements and disposal considerations — all in the context of evolving regulations.



# Your global partner for PFAS treatment and management

As a world-class provider of technology, projects, products and services and a leader in environmental services, we're working toward a future where concerns about PFAS management are a thing of the past.

We have decades of experience implementing and operating technologies that are scientifically proven and tailored to each project. We will provide solutions to maximize your efficiency in water and waste management, while complying with emerging PFAS regulations and treatment requirements.



170+
ongoing/upcoming active projects

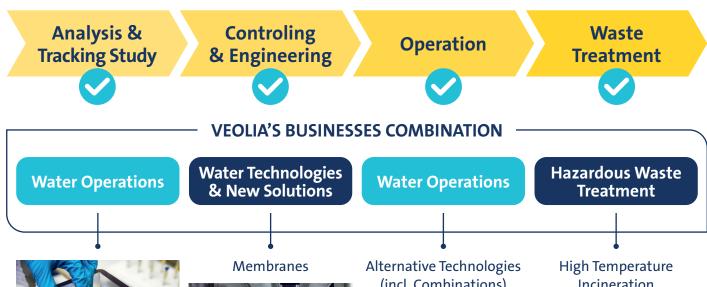


10K+
water samples analyzed

## **BeyondPFAS: Peace of mind** for your operations, reputation and communities

BeyondPFAS, our suite of end-to-end PFAS management solutions, is designed to support you at every step, from sampling and analysis to responsible disposal of contaminants.

Our holistic approach involves initial site assessment and sampling, implementing tailored treatment technologies based on your needs. We are committed to safely handling and disposing contaminates in line with laws and regulations, including incineration, deep well injection and approved landfill.







**Activated Carbon** 



Ion Exchange Resins



(incl. Combinations)



**R&D** on Alternative **Technologies** 



Incineration

Physico-Chemical Treatment, Stabilization and Landfilling, Soil

Remediation and **Secondary Treatment** 



# Global leader in PFAS treatment

Veolia is a global leader in PFAS treatment, with capabilities spanning conventional to cutting-edge technologies, from pre-treatment to polishing.

We continuously pilot new, innovative solutions such as foam fractionation and novel adsorbents to ensure your operations comply with emerging PFAS regulations and treatment requirements.



## SCIENTIFICALLY TESTED AND PROVEN TECHNOLOGIES

Granular activated carbon (GAC)

High rejection reverse osmosis (RO)

High flow rate water filtration and clarification Specialized anion exchange resins Biosolids dryers and thermal oxidation



Actiflo® Carb
- high-rate
clarification
plus powder
activated carbon
(PAC)



LEAPfas™ granular activated carbon and ion exchange lead-lag vessels



PROflex and SIRION™ reverse osmosis platforms



BioCon™ energy recovery system (ERS) - biosolids treatment and combustion system

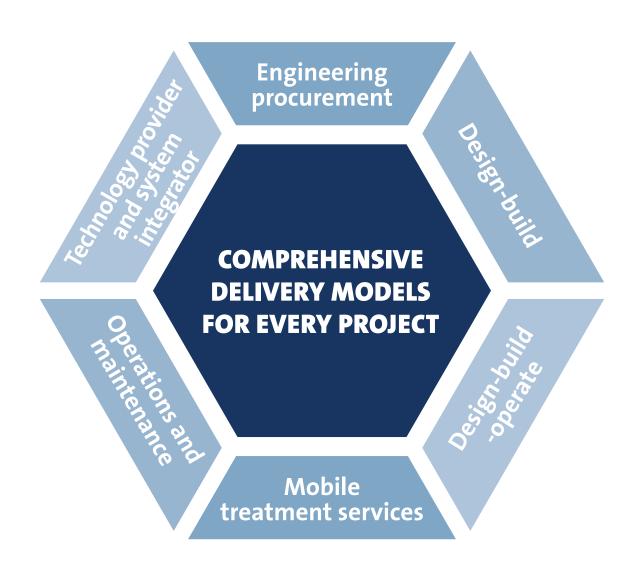


High temperature fluid bed (HTFB) thermal oxidation



# Flexible solutions to mitigate risks

Our end-to-end solutions mean you can feel in control. It also means we can provide a tailored approach to help you streamline implementation, optimize costs, minimize risks and secure long-term operational efficiency. Our adaptable business models allow for a smooth transition from quick-response mobile to long-term permanent water treatment equipment, meeting your changing needs. Continuity of treatment ensures you maintain regulatory compliance in water, wastewater and waste management.



# Compliant, comprehensive PFAS waste handling and disposal

Veolia draws upon extensive expertise in water treatment to safely manage PFAS-containing waste for our clients. As regulations evolve, we're at the forefront, offering innovative disposal solutions to meet compliance requirements and safeguard your environmental interests.

Our solutions are designed to meet your needs — we offer secure landfilling and deep well injection, and our state-of-the-art incineration facility in Port Arthur, Texas, United States, is permitted to treat RCRA hazardous, TSCA PCBs and dioxin waste and is approved to receive CERCLA waste. All Veolia solutions are scientifically proven and fully EPA¹-compliant.

VEOLIA'S
PORT ARTHUR
INCINERATOR
DESTROYS
>99.9999%
OF PFAS.



# AFFF INCINERATION SOLUTIONS

#### THE CHALLENGE

AFFF, a fire-fighting foam that contains PFAS compounds, is stored on-site at refineries for fire mitigation purposes. Our customer needed to remove, treat and replace the PFAS-containing AFFF.

#### OUR SOLUTION

Our Port Arthur, Texas, United States, high-temperature incinerator. The incineration process has a destruction and removal efficiency of 99.9999%.

#### WHAT SETS US APART

#### Experience

We've managed 543,396 liters of PFAS-containing AFFF via high-temperature incineration.

#### **Expertise**

The Port Arthur incinerator is permitted to treat RCRA hazardous waste and PCB waste, and it is the only facility in the U.S. permitted to treat dioxin waste.

<sup>&</sup>lt;sup>1</sup> United States' Environmental Protection Agency.

As an owner and operator of more than 7,000 municipal water and wastewater facilities worldwide<sup>2</sup>, Veolia has already successfully implemented solutions to remove regulated PFAS chemicals.

In 2024, Veolia has been awarded the largest water management contract in Europe, a 12-year agreement with the SEDIF (Greater Paris Water Authority) including PFAS and micropollutants' treatments.

VEOLIA'S 150 CUTTING-EDGE INNOVATIONS, INCLUDING 10 WORLD PREMIERES, TO ACHIEVE EXCEPTIONAL WATER QUALITY.



# ADDRESSING PFAS IN DRINKING WATER IN THE ÎLE-DE-FRANCE REGION, FRANCE

#### THE CHALLENGE

Addressing the removal of substances soon to be banned by the Public Health Code, including micropollutants and PFAS, while guaranteeing the affordability of drinking water.

## OUR SOLUTION

A pioneering response based on our cutting-edge low pressure reverse osmosis (LPRO) technology. A membrane filtration system that allows the treatment of micropollutants.

#### WHAT SETS US APART

Unrivaled expertise and ability to develop technologies for the future that closely align with real life issues facing local areas and regions.

# Leading the way in emerging pollutant management in drinking water

In 2024, following a wide-ranging detection campaigns of 20 major regulated PFAS in France, Veolia committed to dedicating unprecedented means to micropollutant treatment, prior to the regulations that will enter into force in January 2026.

A pioneer in the treatment of pollutants in drinking water, the Group leverages its global expertise and the power of its innovation to propose solutions suited to every local economic and technological reality.

99% OF VEOLIA'S DRINKING WATER OUTLETS COMPLY WITH PFAS STANDARDS.



#### SUPPORTING LOCAL AUTHORITIES IN THE PREPARATION OF UPCOMING REGULATIONS IN DRINKING WATER IN FRANCE

#### THE CHALLENGE

Ahead of PFAS regulations changes, to detect and analyze PFAS presence in drinking water in France.

### OUR SOLUTION

Veolia launched a nationwide testing campaign to establish an inventory of 20 regulated PFAS in drinking water in France.

## THE OUTCOME

More than 2,400 drinking water supply points managed by Veolia, covering more than 20 million inhabitants, were analyzed. As a result of this campaign, Veolia can certify that over 99% of its drinking water outlets comply with PFAS standards.

Veolia innovates to solve tough industrial challenges. With decades of experience helping companies across a wide range of industries, our proven track record includes 170+ successful industrial water PFAS ongoing/upcoming projects.

We meet the unique challenges of your market, delivering efficiencies, cost savings and sustainable practices. Whether achieving the highest purity standards for a microchip manufacturer or treating wastewater from a food processing plant, we develop targeted, compliant strategies tailored to your operations.

#### Scientifically proven PFAS solutions for these and other markets:

- Automotive
- · Chemical processing
- Food and beverage
- Microelectronics
- Military operations
- Oil refineries
- Pharmaceutical
- Power generation
- · Pulp and paper



## INDUSTRIAL PFAS WASTEWATER TREATMENT

#### THE CHALLENGE

Regulations around PFAS are changing rapidly, and increased requirements for wastewater discharge resulted in operational challenges for our client.

We installed mobile treatment equipment and conducted on-site and lab testing for a full-scale solution.

#### OUR SOLUTION

Using activated carbon, RO membranes and thermal technology, we designed the following treatment process:

Solids Removal  $\rightarrow$  Hardness Removal  $\rightarrow$  RO Concentration  $\rightarrow$  Evaporation  $\rightarrow$  Final PFAS treatment and discharge and reuse of treated water.

### THE OUTCOME

99%+ PFAS reduction, with an inlet wastewater treatment capacity of 1,200 m³ per day.

At Veolia, we empower cities and businesses to create positive ecological transformation. We are committed to protecting our communities, safeguarding the natural environment and helping our customers feel confident that what lies beyond today is a safer, cleaner future.

What's BeyondPFAS?

**Peace of mind.** 



