

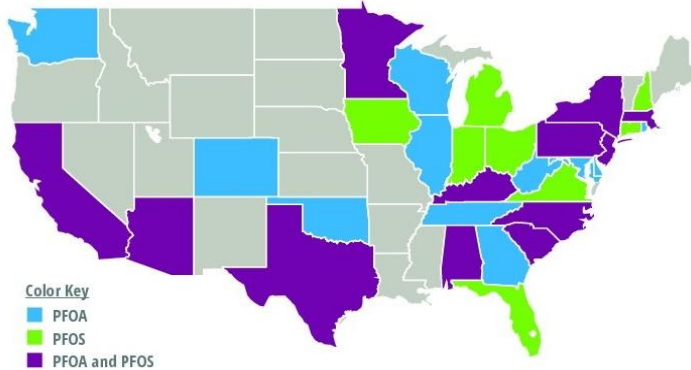
PFAS Capability

Treatment and Removal

PFAS (Per- and Polyfluorinated-Alkyl Substances)

Per- and Polyfluorinated-Alkyl Substances (PFAS) are a class of anthropogenic chemicals containing fluorinated carbons with a charged functional group (usually carboxylic acid or sulfonic acid) that is extremely resistant to degradation. PFAS is water soluble and can be prevalent in ground waters, storm runoff, wastewater treatment plant discharges, and industrial releases to the environment.

PFOA and PFOS Occurrence



Source: Map created from data collected by Eurofins Eaton Analytical

Regulatory Impacts

Due to the apparent health risks associated with PFAS in drinking waters, USEPA and many state regulatory agencies have either issued health advisories or have regulatory limits for the two most common compounds - PFOA and PFOS. In 2016, EPA issued new lifetime health advisories for PFOA and PFOS at 70 part per trillion (ng/L) as a combined advisory level. Over 30 states have either proposed regulatory limits or have regulated limitations on PFAS and specific compounds in drinking water.

Treatment Begins Here:

Testing by Veolia

Conventional water and wastewater treatment processes do not effectively remove PFAS. Veolia offers a range of customized solutions based on individual water source demands. Bench scale and/or pilot testing can be done in order to determine a treatment configuration best suited for the type and concentration of PFAS, the presence of other contaminants and organics in the source water, and the desired quality of the treated water.

Veolia Solutions

If ground water is the source for your treatment plant and you only require a polishing step to reduce PFAS concentrations, Veolia offers cost effective standard solutions such as activated carbon pressure filters and ion exchange systems to accomplish this. If your ground water source has other areas of concern in addition to PFAS such as hardness, nitrates, perchlorate, organics or is under the influence of surface water, Veolia can provide a complete system for your total treatment needs.

If surface water is the source for your treatment plant, Veolia offers a wide range of pretreatment and post-treatment technologies to address all of your PFAS treatment needs

If needed, Veolia can deploy mobile treatment units to maintain water production while source water management and treatment technology evaluations are conducted.

Tailored Solutions

Mobile Services

Veolia maintains a fleet of mobile water treatment units that can be deployed to site for in-situ treatment.



Standardized Solution

Ion Exchange & Activated Carbon

Veolia also provides standardized package systems that can be delivered to site as one unit.



Customized Treatment

If your raw water quality requires pretreatment to maximize the effectiveness of the PFAS removal technology, Veolia can provide a variety of pretreatment options allowing for the most cost effective total treatment solution to be determined.



Softening

Actina™ Pellet Softening
IONSOFT™
Multiflo™ Soft
ACTIFLO® Soft

Pretreatment for Organics / Nitrate / Turbidity Removal

ACTIFLO® Carb
Filtraflo™ Carb
Hydrotech Discfilter
Biological Treatment for Nitrates

PFAS Removal

SIRION™ Reverse Osmosis
Hydrex™ Ion Exchange
Filtraflo™ Carbon Filters

Kruger

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