AquaPRS[™] PFAS Removal Rental System



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Per- and Polyfluorinated substances (PFAS) are a group of man-made chemicals that are common in the environment. There are close to 14,000+ of these harmful constituents within the environment that don't easily degrade. Many are found in specific types of industrial manufacturing. Unfortunately, the characteristics that make them useful such as food packing, water resistant clothing and firefighting foam are the reason they persist in the environment. PFAS also dissolve in water, and combined with their chemical properties, create a challenge for water and wastewater treatment technologies to effectively remove these harmful constituents.

Aqua-Aerobic Systems has completed extensive development and testing since 2019 in the removal of PFAS with the new AquaPRS[™] PFAS Removal System. The system consists of a unique Separator technology and exclusive, carbon-based Sorbent that is up to 600 times smaller than ion-exchange (IX) resin or granular activated carbon (GAC) and 30 times that of powder activated carbon (PAC).

The AquaPRS system offers a viable alternative to existing PFAS technologies that can address military remediation applications, industrial discharges and new/future drinking water and wastewater regulatory requirements. The technology significantly reduces sorbent requirements which reduces disposal costs to facilitate ultimate removal of PFAS from the environment. The sorption technology can be coupled with pre-treatment technologies, such as clarification / filtration depending on the nature of the drinking water or waste streams. Drinking water is produced from high quality, particulate free effluent. In-plant reclamation or remediation efforts can also be attained due to the reduction of in-plant water demands.

Features and Advantages

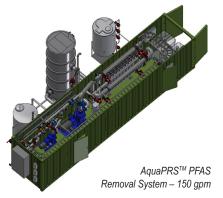
- Containerized, full-scale AquaPRS™ PFAS Removal System
- System utilizes exclusive Aqua PR-206™ PFAS Removal Sorbent
- · Separator material is 5x harder than the sorbent material, operating at a low pressure
- · Includes sorption, settling, CIP, effluent tanks, feed and recycle pumps
- · Automatic controls, remote process monitoring and operation

Applications

- · Industrial Manufacturing
 - Chemical
 - Plating
 - Refining
- Municipal Drinking Water
- · Groundwater Remediation
- · Landfill Leachate w/ Pretreatment
- Surface Water Runoff



Interior View – AquaPRS™ Separation System



Technology Rental System Services

- · Customized test protocol outlines performance objectives and testing methods
- Services of an experienced Aqua-Aerobic rental unit technician to assist as needed, including:
 Supervised placement of the AquaPRS rental trailer and necessary hydraulic and electronic connections
 - Guidance on the process and mechanical operation of the unit for the duration of the rental
 - Sampling, laboratory testing and analysis, if required
 - Training plant personnel on operation and maintenance of the rental unit
 - Decommissioning of the rental unit at completion of use
 - Comprehensive reporting throughout the rental time frame



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The information contained herein relative to data, dimensions and recommendations as to size, power and assembly are for purpose of estimation only. These values should not be assumed to be universally applicable to specific design problems. Particular designs, installations and plants may call for specific requirements. Consult Aqua-Aerobic Systems, Inc. for exact recommendations or specific needs. Patents Apply.