



# PFAS / AFFF Capture and Treat



**Client:** Aviation Facility, NY

**Brownfield Science & Technology, Inc. (BSTI)** was engaged by a private fixed-base operator (FBO) at a municipal airport after they experienced an accidental release of aqueous film forming foam (AFFF) containing C6 PFAS compounds in one of their hangers. The release resulted in impacts to the onsite stormwater retention pond and storm sewer system that discharges to an off-site surface water body.

Within 24-hours of visiting the site, BSTI responded with a solution for an automated recovery system that would allow the demobilization of vacuum trucks that had been deployed on an emergency 24 hour recovery effort. Within two weeks, BSTI's automated recovery system was in place and operating. Recovered water was containerized in over fifty 20,000 gallon tanks awaiting treatment.

BSTI then designed and implemented a system to treat the recovered storm water. The treatment system utilized filtration and dual sorption technologies (carbon/resin) to treat the PFAS impacted water to <4 PPT prior to being discharged to a local POTW. Process controls were all interlocked with the automated recovery system to prevent system upsets.

Treating stormwater offered several challenges because the water chemistry varied throughout the seasons. Water chemistry issues needed to be addressed through an innovative bioaugmentation approach to allow the treatment system to achieve the very low discharge criteria. Approximately five million gallons of impacted stormwater have been successfully collected, treated, and discharged since the project began.

**Objective:** Control migration of PFAS-impacted stormwater. Provide treatment technology for collected stormwater.

## Services

- Remediation design
- Equipment fabrication
- System construction
- Treatment media specification
- Regulatory compliance

## Applied Science/Technologies

- Filtration
- Sorption technologies
- Bio-augmentation
- Chemical analysis
- Mass balance/loading calculations

