

# AFFF/PFAS MANAGEMENT STRATEGY FOR AIRPORTS

PROGRAMMATIC STRATEGIES FOR MANAGING PFAS LIABILITIES



EA has been ranked by *Engineering News Record* as Top 200 Environmental Firm and a Top 500 Design Firm. We provide environmental, health, and safety (EHS) regulatory compliance; site characterization and remediation; air, water, and natural resources management; infrastructure engineering and management; and information technology solutions to a wide range of industrial and government clients nationwide. EA employs more than 600 professionals through a network over 25 commercial offices across the United States.

## PFAS and Airports

Used in some commercial airports since the early 1970s and required by the Federal Aviation Administration (FAA) from 2006 through October 2021, fluorine-based Class B aqueous film-forming foam (AFFF) has been the standard tool for emergency response for petroleum-based firefighting, fire suppression systems in hangars, firefighter training exercises, equipment calibration, and in bulk fuel storage area fire suppression systems.

Fluorine-based AFFF contains a class of synthetic fluorinated organic chemicals known as per- and polyfluoroalkyl substances (PFAS) that have recently been the focus of regulatory agencies and the scientific community due to their environmental persistence, widespread use in many industrial and commercial applications, and their potential toxicity to humans and the environment. FAA has yet to approve a commercially available fluorine-free foam (F3) for airport use.



Existing and anticipated regulations will add a new dimension of risk management to airport operations, air carrier, and fixed base operator (FBO) operations. Capital projects that involve extensive soil or groundwater management will experience increased environmental compliance reporting and result in increased liability and expense for aviation facilities that have potentially released PFAS chemicals into the environment through normal operations.

## Regulatory Highlights

EPA's PFAS Strategic Roadmap (October 2021) outlines incremental milestones for the next several years to regulate a number of PFAS in drinking water (SDWA), establish effluent limitations guidelines (ELGs), add PFAS monitoring to NPDES permitting, designate PFOA/PFOS as hazardous substances under CERCLA, and more. Approximately 30 states have or are contemplating development of PFAS action levels in water and/or soil for PFOS/PFOA and other PFAS. Some states have also developed action levels for an expanded list of PFAS as well as regulations that restrict the use and storage of fluorine-based AFFF at airports.

Use EA's PFAS Strategic Roadmap Timeline Tool



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## Simple Solutions for a Complex Problem

EA can assist your facility in proactively planning for the challenges that may arise from a rapidly evolving regulatory landscape and the uncertainty surrounding the emerging PFAS science. A unified PFAS management strategy is the best way to proactively manage risk and reduce liability from legacy AFFF use practices, AFFF replacement with F3, PFAS waste stream management, investigation of AFFF releases, and identification of Potentially Responsible Parties (PRPs). EA has developed a three-pronged, comprehensive, programmatic approach to help airports and air carriers manage PFAS risks and liabilities.

### PROACTIVE REGULATORY PLANNING

- Identify current and planned future state and local regulations applicable to a specific airport's unique needs (CAA, CWA, etc.)
- Develop a comprehensive, programmatic airport-wide PFAS management plan in conjunction with the airport and air carriers, their legal councils, and their insurance advisors
- Navigate and support regulatory required reporting, public communications, environmental sampling, etc.



### ADDRESSING LEGACY IMPACTS

- Inventory potential historical sources of PFAS (Toxic Release Inventories)
- Perform site assessments
- Develop conceptual site models to understand how contamination moves through the environment
- Perform environmental forensics to trace impacts to their source
- Identify PRPs
- Risk communication



### ADDRESSING AND REDUCING FUTURE PFAS USE AND RELEASES

- Inventory current potential significant sources of PFAS
- Develop management strategies for current potential sources (e.g., soil stockpiles, impoundments, etc.)
- AFFF changeout
- Research and development of AFFF replacement alternatives
- Compliance with state AFFF use prohibitions
- AFFF/PFAS waste stream management
- Surface water discharge effluent limit guidelines regulatory support, NPDES permitting, and management/treatment of PFAS-impacted sites

