

Understanding lessons learned from existing efforts to accelerate the substitution of safer alternatives to aqueous film forming foam

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Background

- US DoD's Strategic Environmental Research and Development Program/ Environmental Security Technology Certification Program (SERDP/ESTCP)– Sponsoring significant research and valuation of Alternatives
- UMass project included several objectives, among them:
 - *Understanding lessons learned from existing efforts to accelerate development and adoption of safer alternatives to AFFF, including barriers and enabling factors.*

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Objective S

- An understanding of critical technology, market or policy factors (actual and perceived) that are **inhibiting the implementation of alternatives** to AFFF.
- An understanding of critical technology, market or policy factors that are **enabling and scaling a transition** to safer and feasible alternatives to AFFF
- An understanding of **lessons learned** from DoD's current efforts to accelerate the adoption of safer and effective AFFF alternatives **that can improve efforts to address future material challenges.**

Methods



Key
informants



Reviews of
the
literature

Factors explored:

- Incumbency
- Confusion
- Health and safety
- Cost
- Performance, including incompatibility concerns
- Transition challenges including training, decontamination, and waste

Primary Inhibitory Factors

1. Transition costs
2. Lack of knowledge of performance for specific real-world scenarios
3. Standards
4. Lack of a coherent national transition strategy



Primary Accelerating Factors

1. Policy mandates
2. Availability of safer alternatives
3. "Just do it" – using direct experience and mock exercises to understand performance and adoption needs
4. Financial liabilities with the continued use of AFFF
5. Fit for performance standards

Stepping back: broader lessons learned for effective substitution

