



DoD PFAS Sampling and Analytical Method Initiatives

***ASDWA Webinar: PFAS Analytical Methods
Applications, Comparisons, and Lab Accreditation
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Sampling Guidance



- *“Bottle Selection and other Sampling Considerations When Sampling for Per- and Polyfluoroalkyl Substances (PFAS)”*, July 2017 <http://www.denix.osd.mil/edqw/home/>
 - Undergoing revision based on recent publications, ongoing studies, and ITRC PFAS documents
- Developing protocols for sampling contained AFFF (hangars, trucks, and drums)
- Developing protocols for effective cleaning of AFFF containers

DoD ELAP Accreditation



- Accreditation is performed by third party ILAC signatory Accreditation Bodies (ABs)
- Accreditation Standard is the DoD/DOE Quality Systems Manual (QSM) for Environmental Laboratories (Version 5.1.1 currently)
- Accreditation is Method/Media/Analyte specific

DoD ELAP Accreditation



- PFAS Accreditation:
 - Drinking water media is accredited for EPA 537
 - All other media accredited to “PFAS by LCMSMS Compliant with QSM 5.1 Table B-15”

<http://www.denix.osd.mil/edqw/>

DoD Analytical Requirements



- PFAS specific requirements are found in DoD/DOE QSM, Version 5.1 or later, Appendix B, Table B-15
 - Based on input from researchers, instrument manufacturers, EPA laboratories, commercial laboratories, and standards and PT providers
 - Includes requirements based on concentration levels and media type (aqueous, solid, tissue, and AFFF)

DoD Analytical Requirements



- PFAS specific requirements are found in DoD/DOE QSM, Version 5.1 or later, Appendix B, Table B-15
 - Only laboratories with a DoD ELAP scope of accreditation listing “PFAS by LCMSMS Compliant with QSM 5.1 Table B-15” are documented as meeting the requirements of Table B-15
 - **NOT** a method, **NOT** applicable to drinking water

DoD ELAP Accredited Labs (as of 10/03/18)



- DW: EPA 537, 12 accredited laboratories
- All other media: “PFAS by LCMSMS Compliant with QSM 5.1 Table B-15” **NOT EPA 537 MOD !!!!**
 - 15 accredited laboratories for aqueous
 - 14 accredited laboratories for solid
 - 3 accredited laboratories for tissue
 - 3 accredited laboratories for AFFF

<http://www.denix.osd.mil/edqw/accreditation/accreditedlabs/>

Analytical Requirements Status



- Revising DoD/DOE QSM, Appendix B, Table B-15 based on evaluation of laboratory assessments, recent publications, and laboratory and project feedback (to be included in DoD/DOE QSM 5.2)
- Performing a Laboratory Control Sample(LCS) Study for PFAS for solid and aqueous media in order to generate LCS and extracted internal standard performance criteria (to be included in DoD/DOE QSM 5.2)

Analytical Method Initiatives



- Collaborating with EPA to develop an isotope dilution method that allows for compliance to DoD/DOE QSM Table B-15 requirements
- Collaborating with Fire Fighting Foam Coalition (FFFC) to develop an isotope dilution method capable of achieving lower limits of quantitation of approximately 31 PFAS in AFFF and AFFF mixtures

Data Review and Validation Initiatives



- Collaborating with EPA to develop a PFAS Data Review Technical Brief
- Developing a PFAS data review guidance document specific to DoD requirements
- Developing a PFAS data validation guidelines
- Developing a TOP Assay guidance white paper

Additional Resources



- SERDP/ESTCP (<https://www.serdp-estcp.org/>)
- NESDI
(<http://navysustainability.dodlive.mil/environment/nesdi/>)
- ITRC: (<https://pfas-1/itrcweb.org/fact-sheets/>)



Questions....

Thank you!

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