May 19 2020 DoD EMDQ Workshop Webinar: Additional Questions with Answers

Regarding equipment blanks (EB): If collected at 1 per 20 samples, how should the results be applied? Only to other samples taken with that same equipment on that day? Samples taken only before the EB, only after the EB, or for longer periods, (i.e., all samples until next EB taken)?

All of the potential qualification schemes could be viable for a given project based on the decisions a project is trying to make. In general, data validation should apply a qualifier to all samples potentially affected by the blank contamination. Determining which samples are potentially affected is a discussion and process done in a transparent way with the project team, and documented in the data validation report and in the data usability assessment. For example, an equipment blank exceedance could indicate problems with the decontamination procedure and may apply to more samples than just the 20 associated with the equipment blank.

If the "X" qualifier is an output of the data validation task, is the "X" updated after the data usability assessment to an "R" or other qualifier in investigation reports?

Yes, the **X** qualifier should be evaluated by the project team or project chemist and the appropriate data qualifier shall be applied as part of the data usability assessment.

The National Functional Guidelines seem to have a hierarchy of when you qualify metals data. If the matrix spike and matrix spike duplicate (MS/MSD) results are outside of acceptance criteria, but the spike duplicate (SD) and post-digestion spike (PDS) results are acceptable – no qualifiers will be assigned. Does the DoD inductively coupled plasma (ICP) data validation guidance provide a similar hierarchy?

The DoD Data Validation Guidelines Module 2 states, "If the MS percent recoveries fail low (<30%) but the PDS was acceptable (within ± 25%), then qualify detects in the parent sample as estimated **J** and non-detects as estimated **UJ**. If the PDS also fails, then qualify detects as estimated **J-** and non-detects as **X**, exclusion of data recommended.

If the MS percent recoveries fail low but still are ≥ 30%, and the PDS was acceptable (within ± 25%), then qualify detects in the parent sample as estimated **J** and non-detects as estimated **UJ**. If the PDS also fails, then qualify detects as estimated **J-** and the non-detects as estimated **UJ**."

Are there plans to develop additional modules to evaluate metals data generated by inductively coupled plasma mass spectrometry (ICP-MS) and atomic absorption (AA) methods?

An ICP-MS module is planned to be developed following the release of Module 4, Gas Chromatography. At this time, the EDQW does not plan to develop a module for AA unless a need is identified.

With modern laboratory information management systems (LIMS), is there value to perform data re-calculations?

Yes, re-calculations would still be warranted to check that calculations performed by LIMS are accurate. It is recommended to do this re-calculation early on in your project or when working with a "new" laboratory.

If a Navy Facility Engineering Command has their own regulator-approved validation procedures and a NAVFAC reviewer recommends using the DoD Data Validation Guidelines, how shall we answer/proceed?

The DoD Data Validation Guidelines are only guidance. If you are required to use alternative validation procedures, those procedures should be used and should be defined in the QAPP.

Can you provide information on how to access the EPA Data Validation Guidelines for Method 537.1?

The EPA Data Review and Validation Guidelines for Perfluoroalkyl Substances (PFASs) Analyzed Using EPA Method 537 can be located using the search tool at www.nepis.epa.gov. There are currently no guidelines specific to EPA Method 537.1.

When can we expect an update to DoD QSM Table B-15?

The next potential update of DoD QSM Table B-15 will occur in concurrence with the release of DoD QSM Version 6.0, which is projected to be in Calendar Year 2021.

Are there any plans for DoD to look into accreditation for Total Oxidizable Precursor (TOP) Assay?

TOP Assay is considered a screening method and currently there are no plans to develop QSM requirements for this test.

Has the list of 40 compounds for the new isotope dilution method been released?

The list of 40 PFAS includes all analytes in both EPA Method 537.1 and EPA Method 533 as well as NEtFOSA, NMeFOSA, NEtFOSE, NMeFOSE, PFOSA, PFDS, PFDoS, PFNS, 3:3 FTCA, 5:3 FTCA, and 7:3 FTCA.

Could you please address the DOD PFAS MEMO on Method 537.1 for Drinking Water dated 02 Mar 2020 in a posting to the EDQW website regarding laboratory certification?

The 02 March 2020 DoD Memo titled "Per-and Polyfluoroalkyl Substances Sampling of Department of Defense Drinking Water Systems" identifies requirements for PFAS drinking water sampling on DoD installations. The Laboratory Method and Record Keeping section of the memo specifies that drinking water samples must be submitted to an EPA, State, or DoD ELAP approved laboratory certified to analyze samples by EPA Method 537.1. When evaluating treated drinking water on DoD installations, DoD ELAP accreditation is not a requirement, but is recommended.

Can you post a link or reference the website that was mentioned regarding information about perfluoroalkyl acids (PFAAs)?

The link that was mentioned was for the Interstate Technology & Regulatory Council (ITRC) PFAS Public Page, which contains a large amount of materials associated with PFAS including PFAAs. The ITRC online document includes the PFAS Technical and Regulatory Guidance Document, a collection of PFAS Fact Sheets, as well as training module videos that help regulators and other stakeholders improve their understanding of the current science regarding PFAS. https://www.itrcweb.org/Team/Public?teamID=78