ICF
ESAT Region 3
US Environmental Protection Agency Environmental Science Center
701 Mapes Road Ft. Meade, MD 20755-5350
Phone 410-305-3012

Date: March 29, 2018

To: Brandon McDonald
ESAT Region 3 Project Officer

From: Ex. 4 CBI
Validator

Ex. 4 CBI
Reviewer

Subject: Organic Data Validation (S4VM)
Procino-Blades PFAS
R35321 C0AA0-PFC

Overview

This data package consisted of four (4) Field Reagent Blanks (FRBs) and four (4) drinking water samples analyzed for perfluorinated alkyl acid compounds by Liquid Chromatography/Mass Spectrometry (LC/MS).

Analyses were performed by TestAmerica Sacramento according to EPA Method 537 utilizing a quantitative isotope dilution-internal standard technique.

Data were validated according to the National Functional Guidelines for Organic Superfund Methods Data Review and applicable USEPA Region 3 modifications. The validation report has been assigned the Superfund Data Validation Label S4VM (Stage_4_Validation_Manual).

Samples were submitted to the laboratory directly by the contractor and not through the EPA Technical Services Branch (TSB). Environmental Services Assistance Team (ESAT) has been tasked to evaluate laboratory reported data for usability, based on the hardcopy data package provided to ESAT dated March 16, 2018.

The laboratory did not provide sufficient data to determine if branched chain isomers of PFOA were included in the reporting of this analyte in field samples. No data were qualified based on this finding.

Summary

No significant data quality outliers or technical deficiencies were identified that would require rejection of sample results. Surrogate data quality outliers were identified resulting in estimation of sample results. Details of this issue are provided below.

Minor problem

Percent recovery for surrogate $^{13}C_2$ PFDA was outside the upper control limit (>130%) for sample C0AA0. Target analytes detected in this sample may be biased high and have been qualified "J+". Reporting Limits (RLs) are not qualified based on this outlier.

Notes

Accuracy and precision criteria were met by the laboratory in the initial and continuing calibration verification standard analyses associated with the samples in this Sample Data Group (SDG).

Target analytes detected below RLs are estimated and have been qualified "J".

The method blank and FRBs associated with the sample in this SDG were free from contamination. No data were qualified based on blank contamination.

Percent recovery for surrogate $^{13}C_2$ PFDA was outside the upper control limit (>130%) for sample C0AA5. No target analytes were detected in this sample. Reporting Limits (RLs) are not qualified based on this outlier.

Percent recoveries and Relative Percent Differences (RPDs) for target analytes in the Laboratory Control Sample/Laboratory Control Sample Duplicate (LCS/LCSD) analyses were within control limits. No field sample data were qualified based on these findings.

Due to insufficient sample volume received by the laboratory, Matrix Spike/Matrix Spike Duplicate (MS/MSD) analyses were not performed in this SDG. No data were qualified based on these findings.

The samples in this SDG were found to be free of residual chlorine at the time of sample preparation by the laboratory. No data were qualified based on this finding.

The samples in this SDG were preserved and reported pH within the optimum range. No data were qualified based on these findings.

Manual integrations were performed and identified by the laboratory. A subset of these was evaluated by the reviewer, and had been found to be accurate and consistent. No action was taken by the reviewer based on manual integrations.

Glossary of Organic Data Qualifier Codes

Validation Qualifiers	In order of descending precedence. Only one of these qualifiers may apply to any result.
R	The data are unusable. The sample results are rejected due to serious deficiencies in meeting QC criteria. The analyte may or may not be present in the sample.
UJ	The analyte was analyzed for, but was not detected. The reported quantitation limit is approximate and may be inaccurate or imprecise.
U	The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit
J	The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.
J+	The result is an estimated quantity, but the result may be biased high.
J-	The result is an estimated quantity, but the result may be biased low.

Additional Qualifiers	Additional qualifiers may be combined with other qualifiers.
N	The analyte has been “tentatively identified” or “presumptively” as present.
B	The result is presumed a blank contaminant. This qualifier is used for drinking water samples only.
C	The target Pesticide or Aroclor analyte identification has been confirmed by Gas Chromatography/Mass Spectrometry (GC/MS). This qualifier may be added to other qualifiers.
X	The target Pesticide or Aroclor analyte identification was not confirmed when GC/MS analysis was performed. This qualifier may be added to other qualifiers.