Supplemental information sheets provide minor corrections or clarifications to requirements outlined in the Department of Defense (DoD) and the Department of Energy (DOE) Quality Systems Manual (QSM). The supplemental information is version specific, and changes will be incorporated in the next revision of the DoD/DOE QSM. Supplemental Information used along with the QSM provides requirements for laboratory accreditation.

QSM 6.0 Requirement	Supplemental Information: 02/08/2024
Table B-24 Matrix Duplicate Minimum Frequency	The matrix duplicate requirement identified in Table B-24 of QSM 6.0 may be omitted for matrices other than AFFF.
QSM 6.0 Requirement	**Supplemental Information: 03/11/2024**
Module 1 Clause 4.1.1	The laboratory shall perform proficiency testing (PT) for individual isomers if the isomers are listed individually on the laboratory's Certificate of Accreditation. For example, if the laboratory lists m and p-xylene and o-xylene separately on the Certificate, the analytes shall be reported separately during PT, but if the laboratory only lists total xylene on the Certificate, only total xylenes shall be reported.
Module 2 Clause 6.2.10	"Radioactive samples" are samples sent by a customer for radiological testing.
Module 6 Clause 7.1.5.c.ii.c	Background subtraction measurements for gas-proportional and semiconductor alpha/beta detectors shall be performed monthly. Changed from "quarterly."
Module 6 Clause 7.3.3.a.x.b	The Duplicate Error Ratio (DER) between the sample and the Matrix Duplicate is ≤ 3. Changed from "< 3."
Module 6 Clause 7.3.3.a.x.c	The relative percent difference (RPD) is less than or ≤ 25%. Changed from "< 25%."

QSM 6.0 Requirement	Supplemental Information: 03/11/2024
Module 6 Clause 8.5.1.c.ii	Each Cell/Detector pair efficiency shall be verified at least annually. The continuing efficiency for each Cell/Detector pair shall be within 25% of the initially determined efficiency. Changed from "+ 25%."
Module 6 Clause 8.5.3.a.v	The acceptance criteria for the method blank shall be |ZBlank| ≤ 3 or within laboratory-developed criteria of ±3 standard deviations of the mean. Changed from "|ZBlank| < 3 and + 3 standard deviations."
Module 6 Clause 8.5.3.b.iii	The LCS shall meet customer specified requirements, acceptance criteria of |ZLCS| ≤ 3, or laboratory-developed acceptance criteria of ± 3 standard deviations of the mean that are within 25% of the known LCS value. Changed from "|ZLCS| < 3 and + 3 standard deviations."
QSM 6.0 Requirement	**Supplemental Information: 08/07/2024**
Table B-3 Sample Preparation and Processing	Note: Drying/grinding may not be appropriate for all analytes.
Table B-3 Matrix Spike (MS)	Reported analytes may be spiked into the MS after analytical subsampling.
Table B-3 Matrix Spike Duplicate (MSD) or Matrix Duplicate (MD)	Reported analytes may be spiked into the MSD after analytical subsampling.

QSM 6.0 Requirement	Supplemental Information: 08/07/2024
Table B-8 Laboratory Control Sample Duplicate (LCSD)	The LCSD QC Check row shall be added to Table B-8. The Minimum Frequency: If sufficient sample is not available for either a MSD or MD, one LCSD shall be included in the preparatory batch. Acceptance Criteria: Recovery: Same as LCS acceptance criteria. Precision: RPD of all analytes ≤ 20% between LCS and LCSD Corrective Action and Qualification Criteria: Where an assignable cause isolated to only the LCSD is identified, the LCSD may be reanalyzed. Otherwise, reprepare and analyze the LCSD and all affected QC and field samples in the associated preparatory batch if sufficient sample material is available. If the samples cannot be reprepared and analyzed, apply qualifier to affected analyte results of all samples in the associated preparatory batch and explain in the case narrative.
Table B-18	Table B-18 should be titled Alpha and/or Beta Particles by Gas Flow Proportional Counting. Changed from “Alpha and Beta Particles by Gas Flow Proportional Counting.”
Table B-19	Table B-19 should be titled Radioactive Nuclides by Liquid Scintillation Counter Analysis Changed from “Tritium in Water by Liquid Scintillation Counter Analysis.”
Table B-22 Instrument Sensitivity Check Acceptance Criteria	All reported analytes for the ISC shall be within ± 35% of true value. Changed from “All reported analytes and surrogates within ± 20% of true value.”

QSM 6.0 Requirement	Supplemental Information: 08/07/2024
Table B-22 Evaluation of Relative Error (%RE) or Relative Standard Error (%RSE) Acceptance Criteria	If no criteria are listed, the laboratory shall develop its own criteria; however, the maximum allowable %RE at or near the mid-range and low level of the calibration shall be 20% and 35%, respectively. Changed from "… %RE at or near the mid-range and low level of the calibration shall be 20% and 50%, respectively."
Table B-25 Internal Standard (IS)	The IS requirement identified in Table B-25 may be omitted when IS are not used.
Table B-30 Surrogate Spike QC Check	A surrogate fortification standard shall be added prior to any processing (e.g. prior to drying/grinding or extraction). Changed from "a solid surrogate fortification standard."
QSM 6.0 Requirement	**Supplemental Information: 12/06/2024**
Table B-4	The acceptance criteria for common contaminants in a method blank shall be included in the Method Blank row and omitted from the Internal Standard row.
Table B-13 Confirmation of positive results Acceptance Criteria	Peak area counts ratio within 2.1 – 3.9. Changed from "Peak area counts ratio within ± 30% of the average peak area count ratio of the mid-range calibration standard, if the calibration is performed on the same day as the analysis, or otherwise, within the average peak area count ratios of all the CCV runs of the analytical batch."

QSM 6.0 Requirement	Supplemental Information: 12/06/2024
Table B-13 Confirmation of positive results Corrective Action and Qualification Criteria	If Isotope Ratio is not within acceptance criteria and the measured concentration of the sample is above the LOQ, the sample shall be reanalyzed. If the sample was not cleaned (i.e., pretreatment), the sample shall be reprepared using a cleanup procedure and analyzed. Dilution may be an appropriate alternative to a cleanup procedure if perchlorate concentrations are sufficient to allow quantitation after dilution. If the Isotope Ratio remains outside acceptance criteria after cleanup, apply qualifier to result and explain in the case narrative. Changed from "If Isotope Ratio is not within acceptance criteria, the sample shall be reanalyzed. If the sample was not pretreated, the sample shall be reprepared using cleanup procedures and analyzed. If the Isotope Ratio remains outside acceptance criteria after cleanup, use alternative techniques to confirm presence of perchlorate, e.g., a post spike sample or dilution to reduce any interference, and apply qualifier to result and explain in the case narrative. The use of cleanup procedures, post spike samples, and dilutions, and the disposition of results of alternate techniques used to confirm presence of perchlorate shall be discussed in the case narrative."
QSM 6.0 Requirement	**Supplemental Information: 02/10/2025**
Table B-17 Continuing Calibration Verification (CCV) Corrective Action and Qualification Criteria	Check control chart for trends. Correct problem and analyze passing CCV or recalibrate. All affected samples since last passing CCV shall be reanalyzed. If the samples cannot be reanalyzed, apply qualifier to specific nuclides in all affected samples and explain in the case narrative. Changed from "Check control chart for trends. Where an assignable cause isolated to only the CCV is identified, one CCV may be reanalyzed immediately (i.e., within one hour and no samples analyzed). If the

	immediate CCV is acceptable, proceed with analysis. Sample reanalysis is not required if the reanalyzed CCV passes. Otherwise, correct problem and analyze passing CCV or recalibrate. All affected samples since last passing CCV shall be reanalyzed. If the samples cannot be reanalyzed, apply qualifier to specific nuclides in all affected samples and explain in the case narrative."
Module 6 Clause 5.2.5.e	MDAs are determined based on factors and conditions such as instrument settings and matrix type, which influence the measurement. The MDA is used to evaluate the capability of a method relative to the required reporting limit (RL). Sample size, count duration, tracer chemical recovery, detector background, blank standard deviation, and detector efficiency shall be optimized to result in sample MDAs less than or equal to the RLs. If RLs are not achieved, then the cause shall be discussed comprehensively in the case narrative. Changed from "MDAs are determined based on factors and conditions such as instrument settings and matrix type, which influence the measurement. The MDA is used to evaluate the capability of a method relative to the required Decision Level. Sample size, count duration, tracer chemical recovery, detector background, blank standard deviation, and detector efficiency shall be optimized to result in sample MDAs less than or equal to the Decision Levels. If Decision Levels are not achieved, then the cause shall be discussed comprehensively in the case narrative."
Module 6 Section 3.0 Terms and Definitions	**Reporting Limit:** A customer-specified lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix. Added definition for reporting limit.
Table B-9 Interference Check Solutions (ICS) or Multi-Element Spectral Interference Checks (SIC) Acceptance Criteria	ICS-AB: Within ± 20% of true value. ICS-AB is not required if the instrument is able to read negative responses. Changed from "ICS-AB: Within ± 20% of true value."