



(a) Documentation shall be kept to insure quality control has been maintained and that proper methodologies have been used for the preparation and analysis of samples. All documentation shall be maintained and be readily available for reference or inspection.

(b) The following QC documentation shall be maintained in each laboratory.

(1) **Bench records.** Data associated with analysis, date, time, analyst, method, amounts, calculations, sample matrix, sample identification.

(2) **Calibration data.** Calibration curve or coefficient of the linear equation which describes the calibration curve; concentration/response (or relative response data) for standards; percent recovery of an initial calibration check standard and the date it was analytically determined; percent recovery of the continuing calibration check standard; and laboratory sample identification of the samples run with this curve.

(3) **Extraction/digestion records.** Date, analyst, type of extraction or digestion for each sample, and laboratory sample identification.

(4) **Surrogate records.** Amount of surrogate spiked, percent recovery of each surrogate, date, analyst, and laboratory sample identification.

(5) **Maintenance logs.** By instrument, dates and description of repairs, preventive maintenance, malfunctions, and other actions affecting instrument performance.

(6) **QC charts.** Quality control procedures for monitoring the validity of the environmental testing. The resulting data shall be recorded in such a way that trends are detectable, and statistical techniques shall be applied to the reviewing of the results. All laboratories shall have detailed written controls in place for positive and negative controls, variability, repeatability, and accuracy of methods.

(7) **Sample login.** Procedures plan for sample login, unique sample identification, date, time, source of sample (including name, location and sample matrix), preservative used, analysis required, name of collectors and any pertinent field data.

(8) **Spike/duplicate/split duplicate data.** Date, analyst, laboratory sample number, amount spiked, percent recovery, percent of difference, and makeup and concentration in the spiking solution.

(9) **Temperature logs.** By oven, incubator, freezer, and or refrigerator, daily (during periods of use) temperature readings and any temperature excursions with corrective action, recorded in a bound logbook.

(10) **Weight logs.** Balance, checked with the appropriate range of class S weights weekly (during periods of use) before use and results recorded in a bound logbook. Each balance shall be calibrated at least once per year by an accredited technician.