

**WAC 16-309-100 Sampling and homogenization protocols.** (1) Upon receipt, the laboratory must inspect each sample package and transportation manifest, assuring they meet the following minimum requirements:

(a) Each sample package must have a transportation manifest accompanying it to the laboratory.

(b) Each manifest must have the identifying information on it documented at the time of collection prior to sending it to the laboratory.

(c) Each manifest must have a unique sample identification number matching the label on the sample.

(d) The laboratory must reject samples when the sample ID number or label on sample container does not match the sample ID number or label on the manifest or when the container shows evidence of tampering.

(2) The laboratory must transfer samples to a secure, limited access area of the laboratory upon receipt for processing and analysis.

(3) Receipt of samples must be documented as to condition of the package, who took possession, and whether there were any unacceptable conditions.

(4) The laboratory must document all persons handling the original sample, aliquots, and extracts.

(5) The laboratory must establish the minimum volume or weight required to conduct all testing requested and any additional tests (i.e., repeat tests, differential tests, or reflex tests) that may be required.

(6) The laboratory must establish storage requirements for all sample types upon receipt at the lab.

All samples received for residual solvent testing must have an aliquot placed in an enclosed container that minimizes the evaporation of any solvents that may be present as soon as possible upon receipt.

(7) Samples that do not undergo initial testing within seven days of arrival at the laboratory must be placed in a secure temperature-controlled storage until testing.

(8) Samples must be handled in a way that avoids cross-contamination during aliquoting and handling by keeping other samples closed and out of the immediate vicinity. Analyte standards must be handled in areas separate from sample preparation areas.

(9) It is not acceptable to reuse any labware that comes into contact with samples or aliquots until after proper cleaning. Labware, equipment, and surfaces must be properly cleaned between each sample preparation or handling.

(10) All disposable pipettes/sample measuring devices can be used only once and must be discarded after use to prevent the possibility of cross-contamination.

(11) Aliquots must be labeled with a unique identifier assigned to the sample both with a barcode and in human-readable form, or just in human-readable form.

(12) When multi-well plates are used for testing, the laboratory must ensure the correct sample is aliquoted into the correct plate well and map the location of each sample on the plate.

(13) The laboratory must have a system to easily retrieve and track samples that are maintained in storage.

(14) Laboratories must ensure sample homogenization is appropriate for each test method performed.

[Statutory Authority: RCW 15.150.030 and 2022 c 135. WSR 24-09-079, § 16-309-100, filed 4/17/24, effective 5/18/24.]