

WAC 173-50-040 Definitions. Definitions in this section apply throughout this chapter, unless context clearly indicates otherwise.

"Accreditation" - The formal recognition by the department that an environmental laboratory is capable of producing accurate and defensible analytical data. This recognition is signified by issuance of a written certificate accompanied by a scope of accreditation indicating the parameters for which the laboratory is accredited.

- The term "accredit" as used in this chapter is intended to have the same meaning as the term "certify" as used in RCW 43.21A.230.

- Any laboratory accredited under this chapter shall be deemed to have been certified under RCW 43.21A.230.

- The department does not, by accrediting any laboratory pursuant to these rules, vouch for or warrant the accuracy of any particular work done or report issued by that laboratory.

"Accreditation year" - The one-year period as stated on the certificate of accreditation.

"Accuracy" - The degree to which an analytical result corresponds to the true or accepted value for the sample being tested. Accuracy is affected by bias and precision.

"Analyte" - The constituent or property of a sample measured using an analytical method.

"Analytical data" - The recorded qualitative and/or quantitative results of a chemical, physical, biological, microbiological, radiochemical, or other scientific determination.

"Analytical method" - A written procedure for acquiring analytical data.

"Audit" - An inspection and evaluation of laboratory facilities, equipment, records, and staff. This may be on-site or virtual.

"Calibration curve" - A series of standards of known concentrations used to determine the relationship between concentration and analytical response.

"Data traceability" or **"traceability"** - The ability to recreate the final result by means of records. This must be an unbroken trail of accountability for verifying or validating the chain of custody of samples, the data, the documentation of a procedure, or the values of a standard.

"Department" - The state of Washington department of ecology when the term is not followed by another state designation.

"Drinking water certification manual" - The Environmental Protection Agency *Manual for the Certification of Laboratories Analyzing Drinking Water*, 5th Edition, January 2005.

"Ecology accrediting authority" - The supervisor of the lab accreditation unit of the environmental assessment program of the department of ecology.

"Environmental laboratory" or **"laboratory"** - A facility:

- Under the ownership and technical management of a single entity in a single geographical location or in a self-contained mobile unit;

- Where scientific determinations are performed on samples taken from the environment, including drinking water samples; and

- Where data are submitted to the department of ecology, department of health, or other entity requiring the use of an accredited laboratory under provisions of a regulation, permit, or contractual agreement.

"Instrument" or **"instrumentation"** - Equipment used to measure an analyte or analytes.

"Lab accreditation unit" - The lab accreditation unit of the department of ecology.

"Laboratory control sample" or **"LCS"** (also known as a "laboratory fortified blank" or "LFB") - An aliquot of analyte-free water or analyte-free solid (e.g., Ottawa sand, anhydrous sodium sulfate, or other purified solid) to which known amounts of the method analytes are added.

"Limit of quantitation" or **"LOQ"** - The smallest concentration that produces a quantitative result with acceptable precision and accuracy, as required by data quality objectives.

"Matrix" - The material to be analyzed, including, but not limited to, ground or surface water, wastewater, drinking water, air, solid waste, soil, tissue, nuclear waste, and hazardous waste. For the purposes of establishing a fee structure (WAC 173-50-190(4)), matrices are grouped as follows:

- Nonpotable water;
- Drinking water;
- Solid and chemical materials; and
- Air and emissions.

"Matrix spike" or **"MS"** - An aliquot of environmental samples to which known concentrations of certain target analytes have been added before sample preparation, cleanup, and determinative procedures have been performed.

"Method detection limit" or **"MDL"** - The minimum concentration of an analyte that can be measured and reported with a 99 percent confidence that the analyte concentration is distinguishable from the method blank results as determined by the procedure set forth in Appendix B of 40 C.F.R. Part 136.

"Out-of-state laboratory" - A laboratory that is not located in the state of Washington.

"Parameter" - The combination of one or more analytes determined by a specific analytical method in a specific matrix. Examples of parameters include:

- The analyte alkalinity by method SM 2320 B in nonpotable water;
- The analyte arsenic by method EPA 200.8 in drinking water;
- The analyte benzene by method EPA 8260 in solid and chemical materials; and
- The analyte fecal coliform-count by method SM 9222 D in nonpotable water.

"Principal laboratory" - A laboratory designated by the Washington department of health to support the drinking water certification program.

"Procedural manual" - The most recent version of the *Department of Ecology's Procedural Manual for the Environmental Laboratory Accreditation Program*.

"Proficiency testing (PT)" - Analysis of samples in the accredited matrix, the true values of which are known to the supplier of the samples but unknown to the laboratory conducting the analyses. PT samples are provided by a source external to the environmental laboratory.

"Quality assurance (QA)" - Activities intended to assure that a quality control program is effective. A QA program is a totally integrated program for assuring reliability of measurement data.

"Quality assurance (QA) manual" - A written record intended to assure the reliability of measurement data. A QA manual documents policies, organization, objectives, and specific QC and QA activities. Volume and scope of QA manuals vary with complexity of the laboratory mission.

"Quality control (QC)" - The overall system of technical activities that measures the attributes and performance of a process, item, or service against defined standards to verify that they meet the stated requirements established by the customer; operational techniques and activities that are used to fulfill requirements for quality.

"Regulatory program" - A program administered by a federal, state, or other regulatory agency.

"Standard operating procedure" or **"SOP"** - A detailed written description of a procedure designed to systematize performance of the procedure.

"Third-party accreditation" - Recognition by the ecology accrediting authority of accreditation granted by another accrediting authority.

"WA ELAP" - Washington state environmental laboratory accreditation program.

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