

**Minnesota Pollution Control Agency (MPCA)  
Laboratory Certification Program Manual  
Attachment 1**

## DEFINITIONS

The following terms and meanings apply to the MPCA Laboratory Certification Manual, as amended. Since many terms are already explained or defined in the manual itself, this attachment is meant to address other terms.

1. "Acceptable" means those results that apply to proficiency testing samples that are within the specified acceptable limits as indicated by an approved vendor, which are used to determine if a laboratory has analyzed a proficiency test sample successfully.
2. "Agency" refers to the Minnesota Pollution Control Agency (MPCA).
3. "Analyte" means the chemical substance, physical property or organism analyzed in a sample.
4. "Analyte group" means a set of analytes that can be determined using the same method or technology.
5. "Batch" means a set of samples prepared or analyzed together, under the same process, instrumentation, personnel and lot of reagents. A preparation batch refers to a batch of samples that are the same matrix. Preparation batch processing is required to be completed in a 24 hour period. The number of samples allowed in a batch is typically 20 (excluding the quality control samples).

When a facility's laboratory does not analyze a parameter for more than 7 compliance samples in a week that are the same matrix type, processing of the batch quality control samples must be done within one week, unless otherwise specified in the approved method. Using this option is reserved to testing done for samples generated by your own facility, typically for BOD/cBOD, once it has been shown that quality control limits are met consistently.

6. "Calibration" means the process used to establish an observed relationship between the response of an analytical instrument and a known amount of analyte, or the process used to determine, by measuring or comparison with a reference standard, the correct value of each scale reading in an instrument, meter or measuring device.
7. "Calibration function" means the specific mathematical relationship established to relate calibration standards to instrument response.
8. "Certification" means that a laboratory has been granted certification by the MPCA laboratory certification program. The Certification Program Administrator (or their designee) completes the functions outlined in the Laboratory Certification Manual. The manual is written with plain English in mind, therefore terms of "we", "us", "our" refer to the MPCA staff responsible for the laboratory certification program.
9. "Chain of custody" means the procedures and records that document the possession and handling of samples from collection through disposal. A chain-of-custody (COC) form is used to document, with a signature, date and time, transfer of the sample from collector to transport/delivery service and then to the laboratory staff receiving the samples.
10. "Correlation coefficient" means a quantity that measures the degree of agreement between the points in a calibration curve and the linear function derived to connect them.
11. "Corrective action" means any measure taken to eliminate or prevent the recurrence of the causes of an existing nonconformity, defect or undesirable condition.
12. "Deficiency" means a documented or verifiable deviation from the requirements of this manual that is noted during an on-site evaluation or while reviewing analytical data produced by a laboratory.

13. "DMR" refers to the Discharge Monitoring Report; "eDMR" is the electronic format.
14. "EPA" means the United States Environmental Protection Agency.
15. "Falsified data or information" means data or information which has been made untrue by alteration, fabrication, omission, substitution, or mischaracterization.
16. "Field Parameters" for the purpose of this manual (as amended) include: dissolved oxygen, pH, temperature, conductivity and total residual oxidants.
17. "Laboratory" means a facility that performs tests in connection with a program which requires data from a certified laboratory. The terms laboratory, or laboratories, includes laboratories that are certified or are seeking certification made available by Minnesota Statute 115.84, to which the requirements of this manual apply. The manual is written with plain English in mind, therefore when "you" is used, it refer to the laboratory, along with the laboratory staff responsible for meeting the requirements in the manual.
18. "Method detection limit" or "MDL" means the minimum concentration of an analyte that can be measured and reported with 99% confidence that the stated concentration is greater than zero, determined from analysis of a set of samples containing the analyte in a given matrix. The method detection limit is generated according to the protocol specified in 40 CFR 136, Appendix B.
19. "MPCA" is the Minnesota Pollution Control Agency.
20. "Municipal" refers to the operation by a municipality, or other local government, of wastewater treatment facilities/plants.
21. "NIST" means the National Institute for Standards and Technology.
22. "NPDES" means National Pollution Discharge Elimination System.
23. "Nonconformance" means a documented or verifiable deviation from the requirements in this manual.
24. "On-site evaluation" means an assessment conducted by the agency at a laboratory that is maintaining or seeking certification to determine compliance with the requirements in this manual.
25. "Parameter" means the chemical substance, physical property or organism being measured.
26. "Quality System" means a structured and documented management arrangement describing the policies, objectives, principals, organizational authority, responsibilities, accountability, and implementation plan ensuring quality in its work processes, products and services.
27. "Reporting Limit" means the lowest level of an analyte that can be accurately recovered from the matrix of interest, for example, the level of quantitation.
28. "SDS" means State Disposal System.
29. "Second source standard" means a standard procured from a supplier or manufacturer different from the supplier or manufacturer of a laboratory's calibration standards, or a standard obtained from the same supplier or manufacturer of a laboratory's calibration standards from a lot verifiably different from the lot of the calibration standards.
30. "Traceability of measurement" means the ability of relating a result or measurement to appropriate state, national or international standards through an unbroken chain of documented comparisons.
31. "Violation" refers to a continued unresolved nonconformance or a serious verifiable deviation from the requirements in this manual.