

Section D1. Data Review, Validation, and Verification Requirements

Data verification and data validation are key steps in the transition from the implementation (sampling and analysis) phase to the assessment phase. EPA has recently provided a comprehensive guidance document (EPA 2001), entitled "*Guidance on Environmental Data Verification and Data Validation (EPA QA/G-8)*". The purpose of this guidance is to explain how to implement data verification and data validation, and to provide practical advice and references. This guidance describes an array of data verification and data validation practices in order to promote common understanding and effective communication among environmental laboratories, field samplers, data validators, and data users.

Although data verification and data validation are commonly-used terms, they are defined and applied differently in various organizations and quality systems. Without attempting to preempt other meanings or approaches, the SWAMP Program will generally follow EPA's informal guidance on this topic, as provided in EPA 2001, and incorporates the following definitions:

Data Verification is confirmation by examination and provision of objective evidence that specified requirements have been fulfilled. Data verification is the process of evaluating the completeness, correctness, and conformance/compliance of a specific data set against the method, procedural, or contractual requirements.

Data Validation is confirmation by examination and provision of objective evidence that the particular requirements for a specific intended use are fulfilled. Data validation is an analyte-and sample-specific process that extends the evaluation of data beyond method, procedural, or contractual compliance (i.e., data verification) to determine the analytical quality of a specific data set.

Data meeting each of the applicable Data Acceptability Criteria contained in **Appendix C** are accepted for inclusion in the SIMS data base. Data which do not meet these requirements are excluded from being entered into the SIMS data base. Information on the data review, validation, and verification processes are provided in Section B10 of this document, and in more detail in the Interim SWAMP IMS Plan in **Appendix J**.