

QA/QC Overview

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Presentation Overview

- What is QA/QC?
- Why is it important?
- What is a QAPP?
- How is data quality measured?



What is QA/QC?

- Quality Assurance = Overall management system
- Quality Control = Routine activities to control error



Quality Assurance

- Organization
- Planning
- Data collection
- Quality control
- Documentation
- Evaluation
- Reporting



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Quality Control

- Internal QC
 - Training
 - Equipment calibration
 - Documentation
 - Quality control sample analysis
- External QC
 - Audits
 - Split samples



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Why is QA/QC important?

- Focuses efforts
- Standardizes activities
- Prevents waste
- Insures a useable product of known quality



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What is a Quality Assurance Project Plan (QAPP)?

A document that outlines the procedures for ensuring data collected and analyzed meets the quality requirements of a specific project.



What are the elements of a QAPP?

- Project management
- Measurement/Data acquisition
- Assessment and oversight
- Data validation and usage



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How is data quality measured?

- Data quality objectives (DQOs)
 - Precision, accuracy, and bias
 - Representativeness
 - Completeness
 - Comparability



How are DQOs quantified?

- Quality control samples
 - Blanks
 - Splits
 - Spikes
 - Duplicates



QA Overview Summary

- Utilize all project planning documents
- Utilize available resources
- Refer to the QAPP throughout the project



Questions?

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