

QUALITY

Three Aspects of Quality: Field Quality, Data Quality, and Report Quality

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PURPOSE

- Review data quality issues with RI deliverables submitted to NAB
 - Greater attention is needed on data quality issues prior to collection
 - Many of the problems are similar
 - Many areas for improvement



FIELD QUALITY

- Level of quality has a direct bearing on comparability and representativeness of data
- Important elements include:
 - Standard Operating Procedures
 - Field documentation
 - Field QC audits



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- Standard Operating Procedures
 - Need to reflect current sampling approaches and apply to the proposed field effort
 - Manufacturers instructions or users manuals may be insufficient as SOPs



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■ Field Data Forms

- Should allow for sufficient information to be captured on the forms
- Should be sufficient number/type of forms for the environmental media to be sampled



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- Field Audits

- Clearly define QC roles and responsibilities
- Include field QC as part of project planning discussions
- Audit conducted by person independent of field effort
- Separate audit report should be prepared
- Include USACE QC oversight



DATA QUALITY

- Perform data usability assessment
- Assess data quality/usability using PARCC parameters
- Assess both field data and analytical data
- Identify deviations from work plan and discuss effects on data quality, if any
- Discuss any cautions/biases associated with data qualifiers (J, K, L, etc.)



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- Data usability assessment puts the data in perspective
 - Were DQOs met? Why or why not?
 - Do the deviations affect data usability? Why or why not?
 - Are the data precise, accurate, representative, complete, and comparable? Why or why not?
 - What cautions should be taken into account when making conclusions on the data?



REPORT QUALITY

- Needs to present a consistent story and well reasoned conclusions supported by the data
- CSM must be consistent with the data
- Sufficient supporting information in appendices should be discussed in text
- Include field notes, audit reports, etc. as appendices
- A well written report goes a long way toward soliciting regulatory buy-in



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QUESTIONS?



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