Quality Assurance Project Plans

An Example Done with SWAMP in Mind

In this Session

- Review of the QAPP Processing Outline
- A Glossary Table
- Examining an Example QAPP

The QAPP Processing Outline



- Important Features
 - Required Signatures
 - Adding Lab QA
 - Review Process
 - Who Gets Original and Copies
 - What Happens
 Afterwards

Glossary of Acronyms

- Quality Assurance Project Plan QAPP
- Quality Assurance Officer QAO
- Performance Based Method System PBMS
- Data/Measurement Quality Objectives DQO MQO
- Standard Operating Procedures SOP

Doe Claire Creek QAPP

Derived from the SWAMP QAPP Template

A Word on the Template



- Self-contained
- Hyperlinked
- Introduction
- Each Section
 - Content
 Requirements
 - Example QAPP
 - Section Blank
- Appendices

Example Project

Completely FabricatedSmall Stream

Field Sampling & Analyses, In-House Lab and Contract Lab PBMS Example

Group A: Project Management

- 1. Title and Approval Page (4-7)
 - Minimum Signatures Required by QAPP
 Processing Outline
 - Addition of Laboratory Director and QAO
- 2. Table of Contents (8-10)
- 3. Distribution List (12-13)
 - Original to State Contract Manager
 - Copies to Everyone Else

- 4. Project/Task
 Organization (14-17)
- 5. Problem Definition/ Background (18-19)
- 6. Project/Task
 Description (21-23)



- 7. Quality Objectives & Criteria for Measurement Data (25-27)
 - The Heart of the QAPP
 - SWAMP Provides DQOs
 - DQOs are Found in Appendix 1 of Template (68)

Putting DQOs into Section 7

- Refer to Binder Material
- Appendix 1 (68)
- Extracted DQO Info
- Selection Process
- Final Format of Table
- Compare with Actual Table in Template (26)



How it Looks in the QAPP



- This is Suggested Format
- What to do About Caffeine?
- Target Reporting Limits from Appendix 3 (80)

Previously Collected Data

- FDCC has Database Containing pH, Conductivity, Temperature, and Dissolved Oxygen
- Will Assess
 Database Data
 Against Same DQOs



Needs/Certification (28-29)

• 9. Documents and Records (30-31)

- 8. Special Training
 Project doesn't Need **Special Training**
 - FDCC Provides Training to Field Crew
 - FDCC Generates & Maintains Records
 - FDCC Gets Records from Dusty Sink

Group B: Data Generation & Acquisition

 10. Sampling Design
 Three Conditions (32-33)

- 11. Sampling Methods (34-35)
- 12. Sampling Handling & Custody (36-39)

- - Same Sites as Prior Studies
 - Focus in Mal de Mer
 - Expand at Mardi Gras
 - **Grab Samples**
- Preservation & Handling from Appendix 2 (71)

- 13. Analytical Methods (41-43)
 - Field Methods Related43) to Lab Method
 - Routine Methods for Bacteria and Metals
 - Caffeine by Uncommon Method (17th ed. AOAC method 979.11)
 - PBMS Info *(105)*

- 14. Quality Control (45-47 and Appendix 4 on page 100)
- Sampling
 - The Process
 - Contributions
 - Field Measurements
 - Bacterial Methods
 - Reference to Dusty Sink's Program for Metals and Caffeine

 15. Instrument/ Equipment Testing (48-49)

 16. Instrument/ Equipment
 Calibration (50-51 and Appendix 4 on page 100)

- Manufacturer's Specifications
 - Damage Checks
 - Method Specified Checks
 - Before Use
 - Follow up Check
 - Criteria

Supplies *(52-53)*

• 18. Non-Direct Measurements (54-55)

- 17. Inspection of
 Mostly Observations
 - Checks of New Standards Against **Old Standards**
 - Checks on Media
 - FDCC Database

Group B - Last!

19. Data
 Management
 (56-57)

• Quality of Records

Group C: Assessment and Oversight

 20. Assessment Response and Actions (58-59)

- Keeping an eye on things.
- Near real-time assessment
- Timely Response
- Power to Shut Down

 21. Reports to Management (60-61)

Group D: Data Validation & Usability

- 22. Data Review,
 How did we do? Verification, and Validation (62-63)
- 23. Verification and Validation Methods (64-65)
- 24. Reconciliation with User Requirements (66-67)

Group Exercise

- Exercise
 - Review a Different
 Example QAPP