**Executive Summary**

The Uniform Federal Policy for Quality Assurance Project Plans (UFP-QAPP) is a consensus quality systems document prepared by the Intergovernmental Data Quality Task Force (IDQTF), a working group made up of representatives from the U.S. Environmental Protection Agency (EPA), the Department of Defense (DoD), and the Department of Energy (DOE). Originally issued in 2005, the UFP-QAPP was developed to provide procedures and guidance for consistently implementing the national consensus standard ANSI/ASQ E-4, *Quality Systems for Environmental Data and Technology Programs,* for the collection and use of environmental data at Federal facilities.

The UFP-QAPP consists of the following parts:

Part 1: UFP-QAPP Manual – general guidance and instructions for preparing QAPPs

Part 2A: UFP-QAPP Workbook – a collection of templates or worksheets that, once completed, addresses all required elements of a QAPP

Part 2B: UFP-QAPP Compendium – specifications for minimum quality assurance (QA) and quality control (QC) activities for hazardous waste projects

Part 2C: Example QAPPs – documents illustrating the implementation of the UFP-QAPP and use of the worksheets for different types of projects in a *graded approach*

This document represents the first revision to Part 2A: The UFP-QAPP Workbook. The original workbook consisted of 37 worksheets or templates, designed to facilitate the preparation of QAPPs. By walking the project team and other stakeholders through a *systematic planning process*, the worksheets were designed to help focus data collection on the specific decisions to be made so that the type, quality, and quantity of data to be collected would be suitable for their intended uses and agreed upon before data collection began.

Although use of the UFP-QAPP workbook has streamlined the preparation and review of QAPPs over the past several years, it has also revealed opportunities for improvement. In 2010, the IDQTF established a subgroup to make recommendations for optimizing the worksheets. The optimization effort was performed with the following objectives:

1. Eliminate redundancy of information contained in certain worksheets;
2. Increase the ease of worksheet population, review, and use;
3. Clarify and promote the use of the systematic planning process and the implementation of a graded approach; and
4. Promote consistency in the use of QA/QC terminology and procedures among the Federal agencies.

**Overview of Part 2A, Revision 1**

The optimization of the UFP-QAPP worksheets was performed in close coordination with EPA’s update of QA/G5, *Guidance for Quality Assurance Project Plans*, which has been superseded by (CIO 2106-G-05 QAPP, September 2011), to promote greater consistency between the two documents. While use of the term QAPP has been retained, the information contained in the worksheets continues to capture the elements that would comprise related project-planning documents, such as a Sampling and Analysis Plan (SAP), Work Plan (WP), and Field Sampling Plan (FSP).

The preparation of Revision 1 involved the consolidation of several worksheets into a final product containing 27 worksheets. For ease of reference, the revised worksheets are named to reflect the original worksheets on which they are based. Instructions for completing the worksheets are contained in green text. Examples are provided in blue text. Examples are for illustration purposes only and should not be construed to establish acceptable standards for any purpose.

The remaining parts of the original UFP-QAPP manual have not been updated but may still be used as aids to the development of QAPPs. The IDQTF is in the process of preparing enhanced instructions and supplemental guidance to aid in the preparation of QAPPs.

**Scope and Applicability**

The UFP-QAPP Workbook, Revision 1 is a tool to guide project teams through the systematic planning process. Although designed for use in support of hazardous waste programs (CERCLA and RCRA) at Federal facilities, use of the UFP-QAPP is applicable to any environmental program for which data will be collected and analyzed, and worksheets may be customized accordingly. Examples of customized applications include the development of QAPPS for compliance testing conducted in accordance with the Clean Water Act (CWA) and environmental investigations conducted in accordance with the Military Munitions Response Program (MMRP). Project teams are encouraged to use the *graded approach* when developing QAPPS, giving appropriate consideration to the significance of the environmental problems to be investigated, the types of environmental decisions to be made, the impact on human health and the environment, and available resources.

The optimized worksheets address all requirements of ANSI/ASQ E4-2004 and CIO 2106. Users are free to modify the worksheets as necessary to suit project-specific requirements; however all elements required by ANSI/ASQ E-4 and CIO 2106-G-05 must be addressed, or a satisfactory explanation must be provided for their exclusion. Table 1 provides a crosswalk between the worksheets and the respective elements of CIO 2106-G-05. In addition, each revised worksheet includes a reference to the appropriate CIO 2106-G-05 element.

It is emphasized that the final, approved QAPP is designed to be a stand-alone document containing all specifications and procedures necessary for project personnel to carry out their assigned responsibilities. For example, the field team should be able to rely on the QAPP for complete sampling instructions, including how to sample, where to sample, how many samples to collect, the types of bottles, preservatives, related QC, etc. If the approved QAPP provides insufficient procedures to carry out all tasks, then SOP’s must be attached to the QAPP. If required elements are contained in other documents, those documents may be referenced; however the documents must be available to all personnel responsible for reviewing and implementing the QAPP.

## Table1. Crosswalk: UFP-QAPP Workbook to 2106-g-05 qapp

| **Optimized UFP-QAPP Worksheets** | | **2106-G-05 QAPP Guidance Section** | |
| --- | --- | --- | --- |
| 1 & 2 | Title and Approval Page | 2.2.1 | Title, Version, and Approval/Sign-Off |
| 3 & 5 | Project Organization and QAPP Distribution | 2.2.3 | Distribution List |
| 2.2.4 | Project Organization and Schedule |
| 4 , 7 & 8 | Personnel Qualifications and Sign-off Sheet | 2.2.1 | Title, Version, and Approval/Sign-Off |
| 2.2.7 | Special Training Requirements and Certification |
| 6 | Communication Pathways | 2.2.4 | Project Organization and Schedule |
| 9 | Project Planning Session Summary | 2.2.5 | Project Background, Overview, and Intended Use of Data |
| 10 | Conceptual Site Model | 2.2.5 | Project Background, Overview, and Intended Use of Data |
| 11 | Project/Data Quality Objectives | 2.2.6 | Data/Project Quality Objectives and Measurement Performance Criteria |
| 12 | Measurement Performance Criteria | 2.2.6 | Data/Project Quality Objectives and Measurement Performance Criteria |
| 13 | Secondary Data Uses and Limitations | Chapter  3 | QAPP ELEMENTS FOR EVALUATING EXISTING DATA |
| 14 & 16 | Project Tasks & Schedule | 2.2.4 | Project Organization and Schedule |
| 15 | Project Action Limits and Laboratory-Specific Detection / Quantitation Limits | 2.2.6 | Data/Project Quality Objectives and Measurement Performance Criteria |
| 17 | Sampling Design and Rationale | 2.3.1 | Sample Collection Procedure, Experimental Design, and Sampling Tasks |
| 18 | Sampling Locations and Methods | 2.3.1 | Sample Collection Procedure , Experimental Design, and Sampling Tasks |
| 2.3.2 | Sampling Procedures and Requirements |
| 19 & 30 | Sample Containers, Preservation, and Hold Times | 2.3.2 | Sampling Procedures and Requirements |
| 20 | Field QC | 2.3.5 | Quality Control Requirements |
| 21 | Field SOPs | 2.3.2 | Sampling Procedures and Requirements |
| 22 | Field Equipment Calibration, Maintenance, Testing, and Inspection | 2.3.6 | Instrument/Equipment Testing, Calibration and Maintenance Requirements, Supplies and Consumables |
| 23 | Analytical SOPs | 2.3.4 | Analytical Methods Requirements and Task Description |
| 24 | Analytical Instrument Calibration | 2.3.6 | Instrument/Equipment Testing, Calibration and Maintenance Requirements, Supplies and Consumables |
| 25 | Analytical Instrument and Equipment Maintenance, Testing, and Inspection | 2.3.6 | Instrument/Equipment Testing, Calibration and Maintenance Requirements, Supplies and Consumables |
| 26 & 27 | Sample Handling, Custody, and Disposal | 2.3.3 | Sample Handling, Custody Procedures, and Documentation |
| 28 | Analytical Quality Control and Corrective Action | 2.3.5 | Quality Control Requirements |
| 29 | Project Documents and Records | 2.2.8 | Documentation and Records Requirements |
| 31, 32 & 33 | Assessments and Corrective Action | 2.4 | ASSESSMENTS AND DATA REVIEW (CHECK) |
| 2.5.5 | Reports to Management |
| 34 | Data Verification and Validation Inputs | 2.5.1 | Data Verification and Validation Targets and Methods |
| 35 | Data Verification Procedures | 2.5.1 | Data Verification and Validation Targets and Methods |
| 36 | Data Validation Procedures | 2.5.1 | Data Verification and Validation Targets and Methods |
| 37 | Data Usability Assessment | 2.5.2 | Quantitative and Qualitative Evaluations of Usability |
| 2.5.3 | Potential Limitations on Data Interpretation |
| 2.5.4 | Reconciliation with Project Requirements |