**EPA REGION 8 QA DOCUMENT REVIEW CROSSWALK for the Brownfields Program**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **QAPP/ SAP for:**  *(check appropriate box)* | | **Entity** *(grantee, contract, EPA AO, EPA Program, Other)*  Click here and type Entity | | | | **Regulatory Authority**  **and/or**  **Funding** | | **\_\_\_ 2 CFR 1500.12 for** G**rantee/Cooperative Agreements**  **\_\_\_ 48 CFR 46 for Contracts** | |
|  | **GRANTEE** |
|  | **CONTRACTOR** |
| **Document Title**  ***[Note: Title will be repeated in Header]*** | | Click here and type Title | | | |  | |  | |
| **QAPP/ SAP Preparer** | |  | | | |  | |  | |
| **Period of Performance**  *(of QAPP/ SAP)* | |  | | | | **Date Submitted for Review** | |  | |
| **EPA PO/COR** | |  | | | | **PO/COR Phone #** | |  | |
| **Brownfields DAO or**  **QA Program Reviewer** | |  | | | | **Date of Review** | |  | |
| **Date of Approval** | |  | |
| ***Documents Submitted for QAPP Review* (QA Reviewer must complete)*:***  **1. QA Document(s) submitted for review:**   |  |  |  |  | | --- | --- | --- | --- | | **QA Document** | **Document Date** | **Document Stand-alone** | **Document with QAPP** | | QAPP |  | Yes / No |  | | SAP |  | Yes / No | Yes / No | | SOPs |  | Yes / No | Yes / No |   **2. WP/SOW/TO/PP/RP Date \_\_\_\_\_\_\_\_\_\_\_**  **WP/SOW/TO/RP Performance Period \_\_\_\_\_\_\_\_\_\_\_\_\_**  **3. QA document consistent with the:**  WP/SOW/PP for grants? Yes / No  SOW/TO for contracts? Yes / No    QAPPs are good for up to 5 years and must be recertified each year. SAPs are good for completion of the sampling event. SAPs are reviewed together with the QAPP.  Make sure ASTM standard is met when applicable. | | | N**otes for Grantees & Contractors Submitting QA Documents for Review:**  **A crosswalk is required for every QA Document. Review will not begin until project-specific crosswalk is provided.**  Project Officers and Contract Officer Representatives (PO/CORs) must have project documentation on file (electronic copies and links are appropriate).  **Grants**: Draft QAPP (consistent with the Grant Workplan) is reviewed by EPA Project Officer. Once approved, the QAPP is the primary QA reference document for the grant. Digital access to the approved QAPP is on file with R8 Brownfields Program. QAPPs must be updated every 5 years with documented annual reviews to document any changes. Draft Sampling and Analyses Plans (SAPs) are submitted for review and must be approved before field work begins. Deviations from QAPP must be explained in the SAP.  **START-V Contractor:** Draft SAP is reviewed by the COR. The SAP must beconsistent with the project Technical Direction (TD) and the Approved QAPP. Digital access to approved QAPP is on file with R8 Brownfields Program. QAPPs must be updated every 5 years with documented annual reviews to document any changes. SAP approval is required before field work begins. Deviations from QAPP must be explained in the SAP. | | | | | | |
| **Summary of Comments** *(highlight significant concerns/issues)***:**   1. Comment #1 2. Comment #2 3. Comment #3 4. **The** Click here and type Entity **must address the comments in the Summary of Comments, as well as those identified in the Comment section** | | | | | | | | | |
| **Element** | | | | **Acceptable**  *Yes/No/NA*  *(EPA)* | **Section # [and/or pg.] & whether QAPP, SAP** | | **Comments** | | |
| **A. Project Management** | | | | | | | | | |
| **A1. Title and Approval Sheet** | | | | | | | | | |
| a. Contains project title | | | |  |  | |  | | |
| b. Date and revision number line (for when needed) | | | |  |  | |  | | |
| c. Indicates organization’s name | | | |  |  | |  | | |
| d. Date and signature line for organization’s project mgr., QA mgr., and others | | | |  |  | |  | | |
| **A2. Table of Contents** | | | | | | | | | |
| a. Lists QA Project Plan information sections | | | |  |  | |  | | |
| b. Document control section information indicated in Table of Contents | | | |  |  | |  | | |
| **A3. Distribution List** | | | | | | | | | |
| Includes all individuals who are to receive a copy of the QA Project Plan and identifies their organization | | | |  |  | |  | | |
| **A4. Project/Task Organization** | | | | | | | | | |
| a. Organizational chart shows lines of authority and reporting responsibilities and lines of communication for QA | | | |  |  | |  | | |
| b. Key individuals and their responsibilities involved in the project | | | |  |  | |  | | |
| c. Include Contractors and subcontractors involved in the project | | | |  |  | |  | | |
| d. Project QA Mgr. position indicates independence from unit generating data | | | |  |  | |  | | |
| e. Identifies individual responsible for maintaining the official, approved QAPP | | | |  |  | |  | | |
| **A5. Problem Definition/Background** | | | | | | | | | |
| a. States decision(s) to be made, actions to be taken, or outcomes expected from the information to be obtained | | | |  |  | |  | | |
| b. Clearly explains the reason (site background or historical context) for initiating this project | | | |  |  | |  | | |
| c. Identifies regulatory information, applicable criteria, action limits, etc. necessary to the project. Site specific documents should provide basis for which criteria are applicable | | | |  |  | |  | | |
| **A6. Project/Task Description (for site-specific events-SAPs)** | | | | | | | | | |
| a. Summarizes work to be performed in a single section, for example, measurements to be made, data files to be obtained, etc., that support the project’s goals | | | |  |  | |  | | |
| b. Provides work schedule indicating critical project points, e.g., start and completion dates for activities such as sampling, analysis, data or file reviews, and assessments | | | |  |  | |  | | |
| c. Details geographical locations to be studied, including detailed maps showing sampling locations where possible | | | |  |  | |  | | |
| d. Discusses resource and time constraints, if applicable | | | |  |  | |  | | |
| **A7. Quality Objectives and Criteria** | | | | | | | | | |
| a. Identifies including project action limits and lab detection limits and  range of anticipated concentrations of each parameter of interest | | | |  |  | |  | | |
| b. Discusses how precision, bias, representativeness, completeness, comparability, and desired method sensitivity are evaluated in project data (each one must be addressed), including the performance criteria for each | | | |  |  | |  | | |
| **A8. Special Training/Certifications** | | | | | | | | | |
| a. Identifies any project personnel specialized training or certifications and how training will be provided. Indicates personnel responsible for assuring training/certifications are satisfied and where this information is documented | | | |  |  | |  | | |
| **A9. Documentation and Records** | | | | | | | | | |
| a. Identifies report format and summarizes all data report package information | | | |  |  | |  | | |
| b. Lists all other project documents, records, and electronic files that will be produced. This includes the entire process - the field notebooks, forms, checklists, chain of custody forms, transmittal of data from the lab, storage and backup of the data and documents, etc. | | | |  |  | |  | | |
| c. Identifies where project information should be kept and for how long and discusses back up plans for records stored electronically | | | |  |  | |  | | |
| d. States how individuals identified in A3 will receive the most current copy of the approved QA Project Plan, identifying the individual responsible for this | | | |  |  | |  | | |
| **B. Data Generation/Acquisition** | | | | | | | | | |
| **B1. Sampling Process Design (Experimental Design)** | | | | | | | | | |
| a. Describes and justifies design strategy and rationale for sampling locations, indicating the area, volume, or time period to be represented by a sample | | | |  |  | |  | | |
| b. Details the type and total number of sample types/matrix or test runs/trials expected and needed | | | |  |  | |  | | |
| c. Indicates where samples should be taken, how sites will be identified/located | | | |  |  | |  | | |
| d. Discusses what to do if sampling sites become inaccessible | | | |  |  | |  | | |
| e. Identifies project activity schedules such as each sampling event, times samples should be sent to the lab, etc. | | | |  |  | |  | | |
| f. Identifies sources of variability and how this variability should be reconciled with project information | | | |  |  | |  | | |
| **B2. Sampling Methods (**In situ and/or continuous monitoring projects must use the standard Region 8 QA Crosswalk.) | | | | | | | | | |
| a. Identifies all sampling SOPs by number, date, and regulatory citation, indicating sampling options or modifications to be taken | | | |  |  | |  | | |
| b. Indicates how each sample/matrix type should be collected | | | |  |  | |  | | |
| c. Indicates how samples are to be homogenized, composited, split, or filtered, if needed | | | |  |  | |  | | |
| d. Indicates what sample containers and sample volumes should be used | | | |  |  | |  | | |
| e. Identifies whether samples should be preserved and indicates methods that should be followed | | | |  |  | |  | | |
| f. Indicates whether sampling equipment and samplers should be cleaned and/or decontaminated, identifying how this should be done and by-products disposed of | | | |  |  | |  | | |
| g. Identifies any equipment and support facilities needed | | | |  |  | |  | | |
| h. Addresses actions to be taken when problems occur, identifying individual(s) responsible for corrective action and how this should be documented | | | |  |  | |  | | |
| **B3. Sample Handling and Custody** | | | | | | | | | |
| a. States maximum holding times allowed from sample collection to extraction and/or analysis for each sample type | | | |  |  | |  | | |
| b. Identifies how samples or information should be physically handled, transported, and then received and held in the lab or office (including temperature upon receipt) | | | |  |  | |  | | |
| c. Indicates how sample or information handling and custody information should be documented, such as in field notebooks and forms, identifying individual responsible | | | |  |  | |  | | |
| d. Discusses system for identifying samples, for example, numbering system, sample tags and labels, and attaches forms to the plan | | | |  |  | |  | | |
| e. Identifies chain-of-custody procedures and includes form to track custody | | | |  |  | |  | | |
| **B4. Analytical Methods** | | | | | | | | | |
| a. Identifies all analytical SOPs (field, lab and/or office) that should be followed by number, date, and regulatory citation, indicating options or modifications to be taken, such as sub-sampling and extraction procedures and identify equipment or instrumentation needed. Standard methods can use a URL or reference | | | |  |  | |  | | |
| b. Lists lab certification and qualifications | | | |  |  | |  | |
| c. Specifies lab turnaround times needed | | | |  |  | |  | | |
| d. Provides method validation information and SOPS for nonstandard methods and provides the method as a URL, reference, or attached as an appendix. | | | |  |  | |  | | |
| **B5. Quality Control** | | | | | | | | | |
| a. For each type of sampling, analysis, or measurement technique, identifies QC activities which should be used, for example, blanks, spikes, duplicates, etc., and at what frequency | | | |  |  | |  | | |
| b. Details what should be done when control limits are exceeded, and how effectiveness of control actions will be determined and documented | | | |  |  | |  | | |
| c. Identifies procedures and formulas for calculating applicable QC statistics, for example, for precision, bias, outliers and missing data | | | |  |  | |  | | |
| **B6. Instrument/Equipment Testing, Inspection, and Maintenance** | | | | | | | | | |
| a. Identifies field equipment needing periodic maintenance, and schedule for this | | | |  |  | |  | | |
| b. Identifies testing criteria and notes availability and location of spare parts | | | |  |  | |  | | |
| c. Indicates procedures in place for inspecting equipment before usage and identifies individual(s) responsible for testing, inspection and maintenance | | | |  |  | |  | | |
| d. Indicates how deficiencies found should be resolved, re-inspections performed, and effectiveness of corrective action determined and documented | | | |  |  | |  | | |
| **B7. Instrument/Equipment Calibration and Frequency** | | | | | | | | | |
| a. Identifies equipment, tools, and instruments that should be calibrated and the frequency for this calibration | | | |  |  | |  | | |
| b. Describes how calibrations should be performed and documented, indicating test criteria and standards or certified equipment | | | |  |  | |  | | |
| c. Identifies how deficiencies should be resolved and documented | | | |  |  | |  | | |
| **B8. Inspection/Acceptance for Supplies and Consumables** | | | | | | | | | |
| a. Identifies critical supplies and consumables for field, including inspection and acceptance processes, and identifies the individual(s) responsible for this | | | |  |  | |  | | |
| **B9. Use of Existing Data (Non-direct Measurements, Secondary Use of Existing Data)** | | | | | | | | | |
| a. Identifies data sources, for example, computer databases or literature files, or models that should be accessed and used, or previous sampling data | | | |  |  | |  | | |
| b. Describes the intended use of this information, rationale for their selection, (i.e., its relevance to project), acceptance criteria, and limitations on the use | | | |  |  | |  | | |
| **B10. Data Management** | | | | | | | | | |
| a. Describes data management scheme from field to final use and storage | | | |  |  | |  | | |
| b. Discusses standard record-keeping and tracking practices, and the document control system or cites other written documentation such as SOPs | | | |  |  | |  | | |
| c. Identifies data handling equipment/procedures that should be used to process, compile, analyze, and transmit data reliably and accurately | | | |  |  | |  | | |
| d. Identifies individual(s) responsible for this | | | |  |  | |  | | |
| e. Describes the process for data archival and retrieval | | | |  |  | |  | | |
| f. Describes procedures to demonstrate acceptability of hardware and software configurations | | | |  |  | |  | | |
| g. Attaches checklists and forms that should be used | | | |  |  | |  | | |
| **C. Assessment and Oversight** | | | | | | | | | |
| **C1. Assessments and Response Actions** | | | | | | | | | |
| a. Lists the number, frequency, and type of QA assessment activities that should be conducted, with the approximate dates | | | |  |  | |  | | |
| b. Identifies individual(s) responsible for conducting assessments, indicating their authority to issue stop work orders, and any other possible participants in the assessment process | | | |  |  | |  | | |
| c. Describes how and to whom assessment information should be reported | | | |  |  | |  | | |
| d. Identifies how corrective actions should be addressed and by whom, and how they should be verified and documented | | | |  |  | |  | | |
| **C2. Reports to Management (QA)** | | | | | | | | | |
| a. Identifies what project QA status reports are needed and how frequently | | | |  |  | |  | | |
| b. Identifies who should write QA reports and who should receive them | | | |  |  | |  | | |
| **D. Data Validation and Usability** | | | | | | | | | |
| **D1. Data Review, Verification, and Validation** | | | | | | | | | |
| Describes criteria that should be used for accepting, rejecting, or qualifying project data | | | |  |  | |  | | |
| **D2. Verification and Validation Methods** | | | | | | | | | |
| a. Describes process for data verification and validation, providing SOPs and indicating what data validation software should be used, if any | | | |  |  | |  | | |
| b. Identifies who is responsible for verifying and validating different components of the project data/information, for example, chain-of-custody forms, receipt logs, calibration information, etc. | | | |  |  | |  | | |
| c. Identifies issue resolution process, and method and individual responsible for conveying these results to data users | | | |  |  | |  | | |
| d. Attaches checklists, forms, and calculations | | | |  |  | |  | | |
| **D3. Reconciliation with User Requirements** | | | | | | | | | |
| a. Describes procedures to evaluate the uncertainty of the validated data | | | |  |  | |  | | |
| b. Describes how limitations on data use should be reported to the data users | | | |  |  | |  | | |