General Monitoring

Quality Assurance Project Plan (QAPP) Template:

 [REMOVE THIS PAGE BEFORE SUBMITTING.]

**\*\*\*QAPP must be reviewed and accepted before work begins.\*\*\***

**PURPOSE:** This template is intended as an aid in developing Quality Assurance Project Plans. It is expected to improve the quality in both the scope and application of the environmental information gained from projects that have applied a systematic approach to project design. Communication with all parties involved on the specifics for implementing the project will help ensure transparency and establish criteria consistent with project objectives regardless of the complexity of the work.

The design of this template is expected to improve both the quality and usability of environmental information from projects. Clear communication of project plans and objectives helps reduce project errors and supports successful project implementation.

**BACKGROUND:** This template follows *EPA IT/IM Directive: Quality Assurance Project Plan Standard, Directive #CIO 2105-S-02.1*, and provides some standardized language for common elements. You should plan to add text that is appropriate to your specific project. Every project is unique, and this QAPP must be edited to meet the specific needs of the project.

**USAGE:** Text enclosed in brackets or highlighted indicates areas meant for review and editing. Red highlighted areas are DOW project specific requirements and may not apply to all projects. Additional text revisions may be needed to meet the requirements of the project. Microsoft Word comment fields are used to provide guidance/advice.

**PRE-SUBMISSION CLEANUP:** Before submitting the QAPP for review:

1. Remove all yellow and red highlighting
2. Make sure all [bracketed] text has been replaced with project specific text
3. Update table of contents and lists of tables and/or figures
4. Remove Microsoft Word comments.

**NEW ACRONYMS:**

EI – Environmental Information

EIO – Environmental Information Operation

PARCCS – Precision, Accuracy, Representativeness, Comparability, Completeness, and Sensitivity

**ADDITIONAL** **RESOURCES:** You may also find the following resources useful:

* [EPA Quality Assurance Plan Standard](https://www.epa.gov/system/files/documents/2024-04/quality_assurance_project_plan_standard.pdf)
* [EPA Region 1 Quality Assurance Project Plan Guidance](https://www.epa.gov/system/files/documents/2024-05/r1-qapp-guidance-may-2024-final.pdf)
* [EPA Quality Assurance Project Plan Tool](https://www.epa.gov/quality/quality-assurance-project-plan-development-tool)
* [EPA Region 3 Quality Assurance Project Plan Template](https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.epa.gov%2Fsystem%2Ffiles%2Fdocuments%2F2024-07%2Fregion-3-qapp_standard-template-final.docx&wdOrigin=BROWSELINK)

## A1. Title Page

Name of Monitoring Project

Quality Assurance Project Plan

Effective: YYYY-MM-DD

Expires: YYYY-MM-DD

Insert Organization Information

**[Insert full contact information for project manager]**

This document has been prepared according to the United States Environmental Protection Agency publication *EPA IT/IM Directive: Quality Assurance Project Plan Standard* dated April 2024 (*Directive #CIO 2105-S-02.1*).

**Abstract:** This document details a quality assurance project plan to guide the successful implementation of [name of project]. [Provide a summary of the project. Two to three sentences are sufficient. A more detailed description of the project is to be outlined in Section *A4 Project Purpose, Problem Definition, and Background*.]

# A PROJECT MANAGEMENT AND DATA QUALITY OBJECTIVES

## A2. Approval/Acceptance Sheet

This quality assurance project plan (QAPP) will be approved prior to the start of work. Modifications to an approved QAPP will require a subsequent round of review and approval before implementation. A data usability assessment report (DUAR) is required for the completion of the project, as described in Section *D Environmental Information Review and Usability Determination*.

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 [Insert name] – Project Manager Date

 [Insert organization name]

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 [Insert name] – Project Quality Assurance Officer Date

[Insert organization name]

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

[Insert Additional key personnel] – Title Date

 [Insert organization name]

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

[Insert name] – DOW Quality Assurance Officer Date

 NYSDEC DOW

**QAPP Update Log**

|  |  |  |  |
| --- | --- | --- | --- |
| **Prepared/Revised By:** | **Date:** | **Version No:** | **Summary of Changes:** |
|  |  |  [V2X-X] | Origination |
|  |  |  |  |
|  |   |  |  |
|  |  |   |  |
|  |  |  |  |
|  |  |  |  |

*‘No substantive changes’ may be listed to reflect updating of references, correcting typographical errors, and clarifying certain language to make the document more useful and effective.*

**Budget Information**

|  |  |
| --- | --- |
| **QA Project Name:** |  |
| **Effective Dates:** |  |
| **Project Budget (non-laboratory):** |  |
| **Project Budget (laboratory):** |  |
| **Funding Source:** |  |
| **Cost Center:** |  |

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## A4. Project Purpose, Problem Definition, and Background

[The purpose of this section is to develop the goals and objectives that will be the basis of the project. This section is critical to ensure the quality objectives are sufficient to meet the needs, outcomes, and decisions of the project. Include the following:

* The problem to be addressed and/or decisions to be made.
* Relevant historical and background information; figures, tables, and narratives are acceptable forms of communicating this information.
* The intended use and audience for the environmental information.
* Include anticipated decisions/outcomes (both regulatory and non-regulatory) based upon the data/information collected.
* The type, quality, and quantity of environmental information needed to meet the projects intended use.]
1. **Objective:**
	1. Summary of environmental information operations:
	2. Deliverable(s):
	3. Deliverables provided to:
2. **Objective:**
	1. Summary of environmental information operations:
	2. Deliverable(s):
	3. Deliverables provided to:

## A5. Project Task Description

### Project Overview

[This section gives an overview of the work detailed in the remaining QAPP sections and connects what is needed to meet project goals/objectives with how it will be obtained. The purpose of this section is to ensure all the participants understand the approach to be used. Summarize the following criteria:

* Overview of work, including all project tasks and all data needs,
* Secondary environmental information that will be collected,
* Identifies measurements and sampling frequency,
* Specifies data interpretation and analytical needs,
* Include monitoring locations, maps, and photos, if applicable,
* Additional sample collection information, i.e. rationale for site/secondary data/model selection and minimum number of samples to be collected.

A table can be provided to help convey this information; see **Table 1**.]

Table 1 Project Sampling Design

| **Parameter** | **Sampling****Locations/****Site ID** | **Latitude** | **Long** | **Sample Type/****Frequency/****Total Samples** |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |

### Project Work Schedule

[A table outlining tasks and timeline for completion can be utilized, see example, **Table 2** below. The project schedule should include critical project points for field, laboratory, analysis, and reporting. Include any known time constraints for a specific task.]

| Table 2 Schedule of Project Tasks |
| --- |
| **Task** | **Task Description** | **Anticipated****Start Date** | **Anticipated****End Date** |
| QAPP finalized approved/accepted | [Submitted QAPP for approval /acceptance by designated individuals from *A1*] |  |  |
| Project Milestones | [Finalize project objectives and acceptance criteria with all participants]  |  |  |
| Schedule of Sampling events | [What tasks are helping to accomplish the objectives established in *A4*] |  |  |
| Analysis of information | [Generation dates and submission dates] |  |  |
| Quarterly Reports | [Results of the measures, identification, statistical methodology, and data management tasks] |  |  |
| Reports  | [Status updates and final reports submitted]  |  |  |

## A6. Information/Data Quality Objectives and Performance/Acceptance Criteria

[Describe the plan to ensure data is of known and documented quality that is suitable for the intended use of supporting the projects outcomes and decisions. A project’s quality specifications can be described at two levels: at the level of the decision or study question (Quality Objectives), and at the level of the environmental information used to support the decision or study question (Performance/Acceptance Criteria).]

### Data Quality Objectives

[Data quality objectives and acceptance/performance criteria should be developed to support the project objectives (seeSection *A4 Project Purpose, Problem Definition, and Background*) either quantitatively or qualitatively. Put simply, determine and state how good the data/information needs to be to support the decisions/conclusions for the project. Identify how the environmental information will be used to support the project’s objectives; consider:

* Who will be utilizing the environmental information,
* What will the environmental information be used for,
* How much data/information is needed,
* What type of data/information is needed.]

### Data Quality Indicators

[Data quality indicators are a factor that contributes to the determination of whether the performance and acceptance criteria were met for a project. Data quality indicators should specify methodology to be used to verify PARCCS parameters, (precision, accuracy, representativeness, completeness, comparability, and sensitivity), for field, laboratory, and existing data. Consider using **Table 3**, which outlines definitions of the parameters, along with columns to identify the projects activities and criteria to assess data quality.]

Table 3 Data Quality Indicators

|  |  |  |  |
| --- | --- | --- | --- |
| **Data Quality Indicator** | **Definition** | **QC Activities** | **DQI Criteria** |
| **Precision** | Measure of agreement among repeated measurements of the same property under identical, or substantially similar conditions | [Field and laboratory replicates] | [RPD ≤20%] |
| **Accuracy** | Measure of the overall agreement of a measurement to a known value | [Calibration standards, blanks] | [All blank samples ≤LOQ100% MS/MSD recovery (±10%] |
| **Representativeness** | Measure of the degree to which data accurately and precisely represent a characteristic of a population, parameter variation at a sampling point, a process condition, or an environmental condition | [Evaluate the data to determine whether it accurately presents the system, population, or situation of interest] |  |
| **Comparability** | Measure of confidence that two or more data sets can contribute to a common analysis |  |  |
| **Completeness** | Measure of the amount of valid data obtained from a measurement system, expressed as a percentage of the number of valid measurements that should have been collected |  | [≥90% samples collected] |
| **Sensitivity**  | Capability of a method or instrument to discriminate between measurement responses representing different levels of the variable of interest |  |  |

## A7. Distribution List

[Include all individuals that have a role in the project. Individuals listed here should also be listed in *A8 Project Organizat*ion and *A9 Organizational Chart*.]

The following individuals are to receive a copy of the approved QAPP, including any revisions, to complete their role in this project.

|  |  |  |  |
| --- | --- | --- | --- |
| Name | Title  | Organization | Document type |
| (Name) | Program Manager | (Organization name) | (electronic or hardcopy) |
| (Name) | QA Officer | (Organization name) | electronic |
|  |  |  |  |
| (Name) | (Title relative to project) | (Organization name) | (electronic or hard copy) |

## A8. Project Organization

The following individuals or groups will actively participate in this project and its oversight:

* **Role:** Project Manager
	+ **Person(s):**
	+ **Phone Number:** (###) ###-####
	+ **Email:**
	+ **Organization:**
	+ **Description:** Oversees project administration, including budget, scheduling and procurement of materials required for successful implementation of this project.
	+ **Responsibilities:**
		- Oversee coordination of interactions with [names of any groups involved].
		- Determine project strategy and overall design, including site location, parameter selection, sampling frequency, etc.
		- Ensure all individuals involved in this project have the proper training to conduct fulfill their assigned role and understand and follow the protocols as detailed in this QAPP.
		- Insert additional tasks here
* **Role:** Project Quality Assurance Officer
	+ **Person(s):**
	+ **Phone Number:** (###) ###-####
	+ **Email:**
	+ **Organization:**
	+ **Description:** Oversees the Quality Assurance activities of this project and is not subject to the direct authority/supervision of the project manager and is independent of individuals conducting the technical activities of the project.
	+ **Responsibilities:**
		- Ensure field procedures, analytical methods, and quality assurance/quality control requirements are consistent with project objectives and are clearly documented in the QAPP.
		- Ensures changes to all planning and project documents receive technical and management review.
		- Maintain the official approved QAPP and any subsequent revisions.
		- Review all project documentation; field data sheets, calibration records, laboratory reports to see if quality control criteria specified in the QAPP were achieved.
		- Ensure corrective actions are taken to address inconsistencies, issues or problems identified from reviews.
		- Insert additional tasks here
* **Role:** Quality Assurance Officer
	+ **Person(s):**
	+ **Phone Number:** (###) ###-####
	+ **Email:** @dec.ny.gov
	+ **Organization:** NYSDEC Division of Water
	+ **Description:** Oversees New York State Department of Environmental Conservation’s Division of Water Quality Assurance activities and is an independent reviewer of this document.
	+ **Responsibilities:**
		- Provide expertise regarding analytical and QA/QC issues.
		- Review for approval the QA project plan to verify that those elements outlined in the *EPA IT/IM Directive: Quality Assurance Project Plan (CIO 2105-S-2.01)* are successfully discussed prior to the start of any project related activities.
* **Role:** Field Crew
	+ **Person(s):**
	+ **Phone Number:** (###) ###-####
	+ **Email:**
	+ **Organization:**
	+ **Description:**
	+ **Responsibilities:**
* **Role:** Analytical Laboratory
	+ **Person(s):**
	+ **Phone Number:** (###) ###-####
	+ **Email:**
	+ **Organization:**
	+ **Address:**
	+ **Description:**
	+ **Responsibilities:**

## A9. Project Organization and Communications

Lines of responsibility and communication for personnel involved in project implementation are illustrated in the project organization chart in **Figure 1**.

Figure 1 Organization chart indicating lines of authority. Solid-lines indicate supervisor and subordinate relationship within this project. Dashed-lines indicate points of communication only.

## A10. Personnel Training/Certification

The Project Manager (or title of the designated person) is responsible for ensuring that all personnel involved with data generation (including agency personnel, contractors, and partners) have the necessary experience (educational/work experience) and training (both technical and quality assurance) to successfully complete their tasks and functions.

[State training, experience, or certification requirements; how it will be provided, who will deliver the training, and who is required to have what type of training/certification to ensure quality of data collection. Include any relevant health and safety considerations and trainings.]

## A11. Documents and Records

[The purpose of this section is to describe the management of project documents and records. It is important to note that the management of project data is discussed later in section *B7 Environmental Information Management*.]

### QAPP Preparation and Distribution

[Describe how the finalized QAPP will be maintained and how updates will be communicated. Identify the process for distributing the QAPP to project personnel and ensuring project personnel have the most current approved version of the document (version control, updates). Identify who is responsible for maintaining updated versions of the QAPP and its distribution.]

### Project Specific Documents and Records

[Identify records and documents used in or produced by the project. Describe what needs to be reported and in what format, e.g. electronic files, or hard copy records.

Examples include:

* Audit reports
* Inspection checklists and reports
* Enforcement documentation
* Amended QAPP
* Landowner permission documentation
* Field forms
* Photos
* Data reports
* Quarterly and annual progress reports to EPA
* Project final report (to include discussion of QA issues encountered, and how they were resolved)]

### Storage of Project Information

[Specify or reference all applicable requirements, including security, for the storage and back up of records and documents that will occur while the project is active, as well as the final disposition of all materials. Include location and retention period for both electronic and hardcopy materials.]

# B IMPLEMENTING ENVIRONMENTAL INFORMATION OPERATIONS

## B1. Identification of Project Environmental Information Operations

[Describe the experimental data generation or data collection design for the project – what environmental information operations will be conducted for the project. Tables can be utilized to convey the required information, see **Table 4** for an example. When applicable, the following should be identified:

* Sample locations; if locations are unknown in advance, identify how the sites will be chosen in the future,
* Sampling frequency at each location,
* Matrices to be sampled,
* Parameters of interest in each matrix,
* Clearly define project scope and identify data gaps that will not be explored,
* Sampling network design & rationale for design,
* Validation study information, for non-standard situations,
* If sampling is event based, clearly define the criteria for an “event”.

The design of the project should be based on sound scientific processes and meet the identified data quality objectives and performance/acceptance criteria.]

Table 4 Sample Components

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sampling Locations** | **Component/Matrix** | **Parameters** | **Number and Type of Samples** | **Sampling Frequency** | **Total Number of Samples** |
|  |  |  |  |  |  |

## B2. Methods for Environmental Information Acquisition

### [Consider using tables to convey the required information for this section, see Table 5 and Table 6 as examples.]

### Field Activities

[Describe the methods to collect, analyze, and evaluate primary project environmental information. This section should be thoroughly detailed; it should include enough detail for the project to be replicated. When describing methodology, identify the following:

* Sample collection procedures,
	+ Identify methods and/or SOPs by number, date, and regulatory citation (where appropriate)
	+ If the methods or SOPs prescribed above are being modified in any way, provide details of the project specific modifications
	+ Implementation requirements
	+ Sample preservation and holding time requirements
		- Consider using a table, such as **Table 5**, to communicate the requirements.
	+ Decontamination procedures
* Specific performance requirements for methods,
	+ Address what to do when a failure in the sampling or measurement system occurs.]

Table 5 Sampling Design

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Parameters** | **Container Type** | **Volume** | **Preservation** | **Holding Time** |
|  |  |  |  |  |

### Laboratory Analyses

[For physical tests or chemical analyses, it is a New York State requirement that all laboratories must be certified by NYS Department of Health Environmental Laboratory Approval Program (ELAP) per NYS Public Health Law 502 and follow analytical methods as required in 40 CFR Part 136. For this section, clearly state:

* Analytical Method, reporting limit, quality control criteria, and performance requirements,
* Steps for documenting corrective actions,
* Laboratory turnaround times.]

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | **Analytical Lab** | **Method** | **Holding Time** | **Precision (RPD)** | **Accuracy (% R)** | **Calibration** | **Blanks** | **Quantification Limit** |
|  |  |  |  |  |  |  |  |  |

Table 6 Analytical Specifications

### Existing Information

[If this project will rely upon existing data (databases, software applications, websites, existing literature, and other sources), the data sources, intended use, rationale and the criteria that will be used to determine if the data is acceptable to use will need to be identified. If the project will not rely upon existing data, indicate N/A for “not applicable” after the section heading, delete following text, and proceed to *B3 Integrity of Environmental Information*.]

Table 7 Non-Direct Measurements

|  |
| --- |
| **Data Sources** | **Intended Use** | **Rationale for Use** | **Acceptance Criteria** |
| [Insert agency name]  | [Identify the target population and the selected parameters] | [List why this data source is being researched for information] | [List what criteria data must meet. Example: laboratory analysis must have been performed by a NYS DOH ELAP accredited laboratory, data must be collected under a QAPP] |

#### Key Resources/Support Facilities

[State if there will be any access issues to the data sources mentioned above, and if this information will be managed within the database created/utilized for the overall project. If no obstacles anticipated, then indicate N/A for “not applicable” after the section heading.]

#### Determining Limits

[If a set of existing data will be used, define the procedures that will be in place to accepting or deleting records from the dataset.]

## B3. Integrity of Environmental Information

[Discuss how the integrity of samples and environmental information will be retained throughout the project. Procedures should be described or referenced to ensure physical and chemical integrity is maintained throughout all operations, such as:

* Sample labeling, include a detailed description of sample label methods making sure to identify the following:
* How samples will be labeled,
* Sample ID origination,
* What information is on the sample label,
* How sample labels will be generated – handwritten or printed out,
* Steps taken to ensure readability.
* Field documentation,
* Sample handling and custody in the field, laboratory, and transport,
* Sample transport and shipment from site,
* Laboratory sample storage,
* Chain of Custody form example,
* Shipping protocols.

Examples of sample labels, custody forms, and sample custody logs should be included as attachments in the Appendix.]

## B4. Quality Control

[Identify and describe the projects quality control activities, and the methods to assess the potential variability that’s inherent to any environmental information operation. For each type of sampling, analysis, or measurement technique identify the following:

* Type and frequency of QC activities used to meet quality objectives and performance/acceptance criteria, such as blanks, spikes, duplicates, etc.
* Procedures and formulas for calculating applicable QC statistics (precision and bias).
* Procedures for when QC results exceed performance/acceptance criteria, describe any corrective actions or validation that will occur and how they will be determined and documented.]

**Data Anomalies**

[State, or reference, the procedures for handling data anomalies, such as outliers and missing data. Describe corrective actions or validation that will occur should data anomalies arise.]

## B5. Instrument/Equipment Calibration, Testing, Inspection, and Maintenance

[Identify all instruments and equipment that will be used to complete tasks for all components of the project. All project field instruments and equipment must have the procedures for calibrating, testing, inspecting, and maintaining described or referenced. **Table 8** illustrates how this information could be presented for field instrumentation**.** Describe how instruments operated by/in the analytical laboratory undergo testing, inspection, calibration, and maintenance performed in accordance with guidelines detailed by the analytical methods and NYSDOH ELAP certification requirements.]

[State the following:

* Identify who will be responsible for its proper operation and function, (i.e. inspections).
* Describe or reference procedures record keeping of activities.
* Note availability and location of spare parts; discuss frequency of part replacement.
* Provide acceptance criteria for equipment and corrective actions.
* Cite calibration records and forms.]

Table 8 Maintenance, Calibration, and Testing of Field Equipment and Instrumentation

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Field Instrument** | **Activity**  | **SOP Reference** | **Title of responsible person** | **Frequency** | **Acceptance Criteria** | **Corrective Action** |
|  | **[Calibration, Maintenance, Testing, or Inspection]** |  |  |  |  |  |

## B6. Inspection/Acceptance for Supplies and Consumables

[Identify extramural supplies and services. Describe how quality of supplies and services is addressed and documented to meet project quality needs. Identify who on the project team is responsible for inspecting and accepting them. If a *Field Equipment and Supplies Checklist* will be used, include as an attachment.]

## B7. Environmental Information Management

[Describe how the environmental information used, generated, and evaluated will be managed during the project; describe the procedures for handling, processing, compiling, analyzing, and record-keeping/storage of environmental information. Include the following:

* Data management scheme, from generation to final use and storage; including data entry and mechanisms for detecting/correcting errors.
* Statement declaring data must be reviewed independently from the data collector and project report author.
* Standard recordkeeping and tracking practices, and document control system (hardware and software requirements).
* Ensures collected data are traceable to individuals collecting the data and to the appropriate planning documents.
* Checklists or standard forms attached to QAPP.
* Data loss and manipulation – identification and prevention through entry, reduction, and reporting.
* Data handling equipment/procedures that will be used to process, compile, analyze, and transmit data reliably and accurately.
* Individuals responsible for elements of the data management scheme.
* Requirements for data security.
* Process for data archival and retrieval.
* Any additional hardware and/or software requirements, specifying the performance requirements.]

# C ASSESSMENT/OVERSIGHT

## C1. Assessment and Response Actions

[Describe how the project’s activities will be assessed to ensure that the QAPP is being implemented as approved. The following elements should be addressed:

* Identify type, frequency, and anticipated schedule of project oversight procedures.
* Identify criteria for assessing findings, and describe how corrective actions will be documented and communicated when project and QA/QC issues arise during project implementation.
* Identify a realistic timeline for making and reporting corrective actions; state all individuals involved.
* In the situation where the QAPP must be revised, identify the procedural steps of revising the QAPP.
* Identify conditions where suspension of work would be appropriate.]

The DOW QAO has the authority to select this project for audit. Audits will be performed by the DOW QAO or other designated staff whose education, knowledge, and work experience are shown to be appropriate for the task.

## C2. Oversight and Reports to Management

[Describe how project management and other stakeholders will be informed of oversight and assessment activities. Include roles and responsibilities, as well as whom is preparing and communicating these reports. All project reports must be approved prior to release, publication, or distribution; be sure to identify and discuss the process to ensure this requirement is met. Refer to **Table 9** as a potential approach to presenting the information.]

Table 9 Project QA Status Report

| **Type of Report** | **Frequency** | **Preparer** | **Recipients** |
| --- | --- | --- | --- |
| QAPP | [Once, prior to the start to work on the project] | [Insert agency name and project role] | [See Distribution list Section A7] |
| Amended or updated QAPP | [As changes or modifications are made] | [Insert agency name and project role] | [All recipients of original QAPP] |
| Progress Report | [Quarterly] | [Insert agency name and project role] | [Insert recipients]  |
| DUAR | [Once] | [Insert agency name and project role] | Quality Assurance Officer |
| Final Project Report  | [Once]  | [Insert agency name and project role] | [Insert recipients] |

# D ENVIRONMENTAL INFORMATION REVIEW AND USABILTY DETERMINATION

A data usability assessment report (DUAR) will be completed by: [YYYY-MM-DD]

## D1. Environmental Information Review

[State criteria for determining whether project information/data meet the previously stated data quality objectives and intended use. To fully develop the section, identify the following:

* Define what steps will be taken to confirm that QA/QC steps have been followed correctly and have met the requirements of the QAPP.
* Describe procedures for validation and verification.
* Identify individual(s) responsible for reviewing and communication results.
* For any issues that may arise, describe how they will be resolved and who has authority to resolve them.

The data quality assessment activities must incorporate the data quality objectives and performance/acceptance criteria previously identified *in A6 Information/Data Quality Objectives and Performance/Acceptance Criteria*. Explicitly state that all environmental information will be reviewed independently from the data generator and project report author.]

## D2. Useability Determination

[Describe how project data/information will be determined to be the correct type, quality, and quantity to support the intended use. This section should retrospectively evaluate the planning process using the outputs of data verification, validation, and data quality assessment. Describe the following:

* How the results of the study will be analyzed and evaluated to determine whether the needs of the project were met and how it will be reported.
* The process that will be used to determine whether the environmental information is useable. Identify how this determination will be documented and the individual(s) responsible.
* The protocol to identify and handle unusable data, with particular emphasis on the impact of such data on project representativeness.]

# REFERENCES

USEPA Chief Information Officer, Pursuant to Delegation 1-19. "EPA IT/IM Directive: Quality Assurance Project Plan Standard (#CIO 2105-S-02.1)." 06 May 2024. *Environmental Information Policy, Procedures and Standards.* October 2024. <https://www.epa.gov/system/files/documents/2024-04/quality\_assurance\_project\_plan\_standard.pdf>.