The following checklist summarizes QAPP requirements for research involving measurements and monitoring (lab/field analysis). More comprehensive guidance on developing QAPPs for research projects is provided in the EPA/240/R-02/009 report titled “Guidance for Quality Assurance Project Plans ([EPA QA/G-5](https://www.epa.gov/sites/production/files/2015-06/documents/g5-final.pdf)).” The completed checklist will be entered into QA Track with the approved QAPP by the QA Manager when final.

## B.1 EXPERIMENTAL DESIGN

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Yes** | **No** | **N/A** | **Requirement** | **Notes** |
|  |  |  | Identify the specific analyte(s) of interest and the matrix/matrices. Classify each measurement parameter as either critical or needed for information only. |  |
|  |  |  | Describe sampling and/or experimental design to generate the data needed to evaluate the research objectives. A description of the design should include the rationale for the design and types and number of samples required, including any field or experimental QC samples. |  |
|  |  |  | Identify sampling locations and frequency of sampling. |  |

## B.2 SAMPLING PROCEDURES

| **Yes** | **No** | **N/A** | **Requirement** | **Notes** |
| --- | --- | --- | --- | --- |
|  |  |  | If non-synthetic (i.e., real-world sample) samples are used describe the sampling design that will be used and the steps taken to assure that representative samples are collected. |  |
|  |  |  | If synthetic (i.e., laboratory-prepared) samples are used, describe the preparation of these samples. |  |
|  |  |  | Describe the decontamination procedures for any sampling equipment that will be reused to prevent cross contamination. |  |
|  |  |  | Provide a list of sample containers, sample quantities to be collected, and the sample amount required for each analysis, including QC sample analysis. |  |
|  |  |  | Describe labeling (information to be included) and uniquely numbering each sample. |  |
|  |  |  | Specify sample preservation requirements (e.g., refrigeration, acidification, etc.) and sample hold times. |  |
|  |  |  | If non-synthetic (i.e., real-world sample) samples are used describe procedures for packing and shipping samples, and provisions for maintaining chain-of-custody, as applicable. |  |

## B.3 MEASUREMENT PROCEDURES

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Yes** | **No** | **N/A** | **Requirement** | **Notes** |
|  |  |  | For field analyses (including in-line measurements), describe in detail or reference each field sample analysis method and instrumentation to be used. Include steps for instrument calibration, measurement, quality control, and documentation of results. |  |
|  |  |  | For laboratory analyses, describe in detail or reference each sample preparation method (e.g., sample extractions) and analytical methods, equipment and instrumentation to be used. Include steps for preparation, calibration, measurement, quality control, and reporting. |  |
|  |  |  | Include specific calibration procedures, including linearity checks and initial and continuing calibration checks, and detection limits. |  |

## B.4 METHOD PERFORMANCE METRICS

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Yes** | **No** | **N/A** | **Requirement** | **Notes** |
|  |  |  | For each analysis method QC check (e.g., blanks, control samples, duplicates, matrix spikes, surrogates) specify the frequencies for performing these checks, associated acceptance criteria, and corrective actions to be performed if acceptance criteria are not met. |  |

QAPP Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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