|  |
| --- |
| Appendix A |
| Technical Systems Audit |
| Pre-Audit Questionnaire |

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# General

Monitoring Organization/Agency/PQAO Audited

**Address:**

Street

City, State, Zip Code

**Date of Technical Systems Audit:** Click or tap to enter a date.

**This section of the questionnaire completed by:** Click or tap here to enter name.

**Key Individuals (e.g., Agency Director, Ambient Air Monitoring Network Manager, QA Manager, etc.):**

|  |  |
| --- | --- |
| **Title/Position** | **Name** |
| Click or tap here to enter text. | Click or tap here to enter text. |

## Program Organization

### a.1 Organizational Chart

Upload an organizational chart, or attach to the form:



a.2 Key Position Staffing

Enter the number of personnel available to each of the following program areas, and any vacancies, if applicable.

|  |  |  |  |
| --- | --- | --- | --- |
| **Program Area** | **Number of People (Primary)** | **Number of People (Backup)** | **Vacancies** |
| Network Management (site setup, siting, ANP, etc.)  | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
| Field Operation (QC checks, site visits, site maintenance, etc.) | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
|
| Quality management (audits, QA documentation, certifications etc.) | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
|
| Data and Data Management (data review, validation and acquisition system, AQS, etc.) | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
|
| Technical support (equipment repair and maintenance)  | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |

Comment on the need for additional personnel, if applicable.

Click or tap here to enter text.

## b. Facilities

Identify the principal facilities where the agency conducts work related to air monitoring. Do *not* include monitoring stations, but *do* include facilities where work is performed by contractors or other organizations.

|  |  |  |
| --- | --- | --- |
| **Ambient Air Monitoring Function** | **Facility Location** | **Comment on any significant changes to be implemented within the next one to two years.** |
|
| Instrument repair | Click or tap here to enter text. | Click or tap here to enter text. |
|
| Certification of Standards (e.g. gases, flow transfers, MFCs) | Click or tap here to enter text. | Click or tap here to enter text. |
|
| PM filter weighing | Click or tap here to enter text. | Click or tap here to enter text. |
|
| Pb analysis | Click or tap here to enter text. | Click or tap here to enter text. |
|
| Data verification and processing | Click or tap here to enter text. | Click or tap here to enter text. |
|
| General office space | Click or tap here to enter text. | Click or tap here to enter text. |
|
| General lab/work space | Click or tap here to enter text. | Click or tap here to enter text. |
|
| Storage space, short and long term | Click or tap here to enter text. | Click or tap here to enter text. |
|
| Air Toxics (Carbonyls, VOCs, Metals) | Click or tap here to enter text. | Click or tap here to enter text. |
|

Indicate below any facilities that should be upgraded or any needs for additional physical space (laboratory, office, storage, etc.)

Click or tap here to enter text.

## c. General Documentation Policies

Complete the following table.

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Comment** |
| Does the agency have a documented records management plan? | [ ]  | [ ]  | Click or tap here to enter text. |
|  |  |  |  |
| * If yes, does this include electronic records?
 |[ ] [ ]  Click or tap here to enter text. |
| Does the agency have a method to track files considered official records and their media type (i.e. paper, electronic)? |[ ] [ ]  Click or tap here to enter text. |
|  |  |  |  |
| Does the agency have a schedule for retention and disposition of records? |[ ] [ ]  Click or tap here to enter text. |
|  |  |  |  |
| Are records kept for at least three years? |[ ] [ ]  Click or tap here to enter text. |
| Who is responsible for the storage and retrieval of records? |  Click or tap here to enter text. |
|  |  |
| What security measures are utilized to protect records? | Click or tap here to enter text. |
|  |  |
| Where/when does the agency rely on electronic files as primary records? | Click or tap here to enter text. |
|  |  |
| What is the system for storage, retrieval and backup of these files? | Click or tap here to enter text. |
|  |  |

## d. Training

### d.1 Training Plan

Complete the following table.

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Comment** |
| Does the agency have a training plan? |[ ] [ ]  Click or tap here to enter text. |
| Where is it documented? | Click or tap here to enter text. |
| Does it make use of seminars, courses, EPA-sponsored college level courses, etc.? |[ ] [ ]  Click or tap here to enter text. |
|  |  |  |  |
| Are personnel cross-trained for other ambient air monitoring duties? |[ ] [ ]  Click or tap here to enter text. |
|  |  |  |  |
| Are training funds specifically designated in the annual budget? |[ ] [ ]  Click or tap here to enter text. |
|  |  |  |  |
| Does the training plan include: | **Yes** | **No** | **Comment** |
| Training requirements by position?  |[ ] [ ]  Click or tap here to enter text. |
| Frequency of training? |[ ] [ ]  Click or tap here to enter text. |
| Training for contract personnel? |[ ] [ ]  Click or tap here to enter text. |
| A list of core QA-related courses? |[ ] [ ]  Click or tap here to enter text. |

### d.2 Training Events

Indicate below the most recent training events and identify the personnel who participated in them.

|  |  |  |
| --- | --- | --- |
| **Event** | **Dates** | **Participant(s)** |
| Click or tap here to enter text. | Click or tap to enter a date. | Click or tap here to enter text. |

## e. Oversight of Contractors and Supplies

### e.1 Contractors

Complete the following table. If your agency does not use contract personnel, proceed to section e.2 Supplies.

|  |  |  |  |
| --- | --- | --- | --- |
|  **Contractors** | **Yes** | **No** | **Comment** |
| Who is responsible for oversight of contract personnel? |[ ] [ ]  Click or tap here to enter text. |
|  |  |  |  |
| Are contractors providing a service (e.g., PM2.5 lab) audited? How often? |[ ] [ ]  Click or tap here to enter text. |
| What steps are taken to ensure contract personnel meet training and experience criteria? |[ ] [ ]  Click or tap here to enter text. |
|  |  |  |  |
| Are contractor Quality Documents reviewed before procuring a service?  |[ ] [ ]  Click or tap here to enter text. |
| How often are contracts reviewed and /or renewed? |[ ] [ ]  Click or tap here to enter text. |
|  |  |  |  |

### e.2 Supplies

Complete the following table.

|  |  |  |  |
| --- | --- | --- | --- |
| **Suppliers** | **Yes** | **No** | **Comment** |
| Have specifications been established for consumable supplies and/or for equipment? |[ ] [ ]  Click or tap here to enter text. |
|  |  |  |  |
| What supplies and equipment have established specifications? |  Click or tap here to enter text. |
|  |  |
| Is equipment from suppliers open for bid? |[ ] [ ]   Click or tap here to enter text. |

# Quality Management

**This section of the questionnaire completed by:** Click or tap here to enter name.

**Key Individuals:**

|  |  |
| --- | --- |
| **Title/Position** | **Name** |
| Click or tap here to enter text. | Click or tap here to enter text. |

## Status of Quality Assurance Program

### a.1 QA Activities

Complete the following table.

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Comment** |
| Does the agency perform *all* QA activities with internal personnel (i.e., developing QMPs/QAPPs/SOPs and DQOs, performing systems audits, assessments and performance evaluations, corrective actions, validating data, QA reporting, etc.)? If no, in the comment field, indicate who is responsible and which QA activities are performed. |[ ] [ ]  Click or tap here to enter text. |
| If the agency has contracts or similar agreements in place with either another agency or contractor to perform audits or calibrations, please name the organization and briefly describe the type of agreement. | Click or tap here to enter text. |
| Does the agency perform *all* QC activities with internal personnel (i.e., zero/span/one-point QC checks, calibrations, flowrate, temperature, pressure and humidity checks, certifying/recertifying standards, lab and field blanks, data collection, balance checks, leak checks, etc.)? |[ ] [ ]  Click or tap here to enter text. |

### a.2 QC Acceptance Criteria

Complete the following tables.

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes/No** | **Location** | **Comment** |
| Has the agency established and documented criteria to define agency acceptable QC results? | Choose an item. | Choose an item. | Click or tap here to enter text. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Pollutant** | **Does the agency adhere to the critical QC acceptance criteria for criteria pollutants1 and meteorological measurements[[1]](#footnote-1)?** | **QC Acceptance Criteria** (if other than validation templates1) | **Action or Warning Limits** | **Corrective Action** |
| Choose an item. | Choose an item. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |

## Internal Performance Evaluation (PE) Audits

### b.1 Internal Audit Questions

Complete the following table.

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Response** |
| Does the agency maintain a laboratory to support quality assurance activities? |[ ] [ ]  Click or tap here to enter text. |
| Has the agency documented and implemented specific audit SOPs separate from monitoring SOPs? |[ ] [ ]  Click or tap here to enter text. |
| Are the QA personnel organizationally independent from the personnel responsible for generating environmental data? (40 CFR Part 58 Appendix A Section 2.2) If no, please explain in the comment field. |[ ] [ ]  Click or tap here to enter text. |
| Are annual performance evaluations (audits) conducted by technician(s) other than the routine site operator(s)? (40 CFR Part 58 Appendix A Section 3.1.2) If no, please explain in the comment field. |[ ] [ ]  Click or tap here to enter text. |
| Does the agency have identifiable auditing equipment and standards (specifically intended for sole use) for audits? |[ ] [ ]  Click or tap here to enter text. |
| Are audit equipment and standards ever used to support routine calibration and QC checks required for monitoring network operations? If yes, please explain in the comment field. |[ ] [ ]  Click or tap here to enter text. |

### b.2 Internal Audit Procedures

If the agency does not have a performance audit SOP (included as an attachment), please describe the performance audit procedure for each type of pollutant.

|  |  |
| --- | --- |
| **Pollutant** | **Performance Audit Procedure** |
| Choose an item. | Click or tap here to enter text. |

### b.3 Certification of Audit Standards

Use the table below to provide information on certification of audit standards (ex. Flowmeters, gas standards, etc.) currently being used.

|  |  |  |  |
| --- | --- | --- | --- |
| **Vendor** | **Audit Standard** | **Certification** | **Certification Frequency** |
| Click or tap here to enter text. | Click or tap here to enter text. | Choose an item. | Choose an item. |

Complete the following table.

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Comment** |
| Does the agency have a separate certified source of zero air for performance audits? |[ ] [ ]  Click or tap here to enter text. |
| Does the agency have procedures for auditing and/or validating performance of meteorological monitoring? |[ ] [ ]  Click or tap here to enter text. |

### b.4 Audit Equipment

Use the table provided below to list the agency’s audit equipment and age of audit equipment.

|  |  |  |
| --- | --- | --- |
| **Manufacturer** | **Make and Model Number** | **Purchase Year or Year Acquired** |
| Click or tap here to enter text. | Click or tap here to enter text. | Choose an item. |

### b.5 Audit Acceptance Criteria

Complete the following tables.

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes/No** | **Location** | **Comment** |
| Has the agency established and documented criteria to define agency acceptable audit results? If yes, comment where (page number, section, etc.) | Choose an item. | Choose an item. | Click or tap here to enter text. |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Pollutant** | **Does the agency adhere to the audit acceptance criteria for criteria pollutants and meteorological measurements1?**  | **PE Audit Acceptance Criteria (if other than validation templates1)** | **Do the audit levels (gaseous PE audits only) meet 40 CFR Part 58 Appendix A Section 3.1.2.1 criteria?** | **Corrective Action** |
| Choose an item. | Choose an item. | Click or tap here to enter text. | Choose an item. | Click or tap here to enter text. |

## Planning Documents Including QMP, QAPP, & SOP

### c.1 QMP Questions

Complete the following table.

|  |  |
| --- | --- |
|  **Question** | **Response** |
| Does the agency have an approved quality management plan (QMP)? | Choose an item. |
| * If yes, who approves the QMP (EPA, self-approval, PQAO, etc.)?
 | Click or tap here to enter text. |
| * Is the QMP multi-media, or air-specific?
 | Choose an item. |
| * Does the agency have any QMP revisions still pending EPA approval?
 | Choose an item. |
| * Has the QMP been approved by EPA within the last 5 years?
 | Choose an item. |
| * What is the approval date of the QMP?
 | Click or tap to enter a date. |

### c.2 QAPP Questions

Complete the following table.

|  |  |
| --- | --- |
| **Question** | **Response** |
| Does the agency have an EPA-approved quality assurance project plan (QAPP)? | Choose an item. |
| * If no, has the agency been delegated self-approval?
 | Choose an item. |
| How often does the air monitoring agency review QAPPs? | Click or tap here to enter text. |
| Does the agency have any QAPP revisions still pending EPA approval? | Choose an item. |
| How does the agency verify that the QAPP is fully implemented? | Click or tap here to enter text. |
| How are staff notified and trained when a QAPP is revised? | Click or tap here to enter text. |
| What personnel regularly receive updates? | Click or tap here to enter text. |
| Does the agency have any missing QAPPs that need to be developed? | Choose an item. |
| * If yes, list any missing QAPPs.
 | Click or tap here to enter text. |

List all QAPPs.

|  |  |  |  |
| --- | --- | --- | --- |
| **QAPP Title** | **Approval Date** | **Pollutants** | **Status** |
| Click or tap here to enter text. | Click or tap to enter a date. | Click or tap here to enter text. | Choose an item. |

### c.3 SOP Questions

Complete the following tables.

|  |  |
| --- | --- |
| **Question** | **Response** |
| Are all standard operating procedures (SOPs) complete, or are some in development? | Choose an item. |
| Are any monitoring SOPs needed? | Choose an item. |
| * If yes, list the SOPs that need to be developed.
 | Click or tap here to enter text. |
| Are SOPs available to all field operations personnel? | Choose an item. |
| Are SOPs for “episodic monitoring” prepared and available to field personnel? Refer to QA Handbook Vol. II, Section 6.0. | Choose an item. |
| Are SOPs based on the framework contained in *Guidance for Preparing Standard Operating Procedures (SOPs) (EPA QA/G-6)*? | Choose an item. |
| Does the agency have SOPs specific to data handling and data validation? | Choose an item. |
| Who approves SOPs? | Click or tap here to enter text. |
| How often are SOPs reviewed and updated? | Click or tap here to enter text. |
| How are staff notified and trained when a SOP is revised? | Click or tap here to enter text. |

List all SOPs.

|  |  |  |  |
| --- | --- | --- | --- |
| **SOP Title** | **Approval Date** | **Pollutants** | **Status** |
| Click or tap here to enter text. | Click or tap to enter a date. | Click or tap here to enter text. | Choose an item. |

## Corrective Action

|  |  |
| --- | --- |
| **Question** | **Response** |
| Does the agency have an operational, documented, and comprehensive corrective action program in place? | Choose an item. |
| * As a part of the QAPP?
 | Choose an item. |
| * As a separate, or part of a, SOP?
 | Choose an item. |
| Does the agency have established and documented corrective action limits for QA and QC activities? | Choose an item. |
| Are corrective action procedures based on results of the following that have exceeded established limits? | Click or tap here to enter text. |
| * 1-Point QC checks
 | Choose an item. |
| * Calibrations and zero/span checks
 | Choose an item. |
| * Flow rate verifications
 | Choose an item. |
| * Performance evaluations (gaseous audits and semi-annual flow rate audits)
 | Choose an item. |
| * Precision goals (collocated PM2.5 and PM10)
 | Choose an item. |
| * Bias goals
 | Choose an item. |
| * NPAP audits
 | Choose an item. |
| * PEP audits
 | Choose an item. |
| * Completeness goals
 | Choose an item. |
| * Data audits
 | Choose an item. |
| * Technical Systems Audits
 | Choose an item. |
| How is responsibility for implementing corrective actions assigned? | Click or tap here to enter text. |
| How does the agency follow up after corrective actions are implemented? | Click or tap here to enter text. |
| Briefly describe recent examples of the ways in which the above corrective action system was employed to remove problems. | Click or tap here to enter text. |

## Quality Improvement

|  |  |
| --- | --- |
| **Question** | **Response** |
| What actions were taken to improve the quality system since the last TSA? | Click or tap here to enter text. |
| Since the last TSA, do your control charts indicate that the overall data quality for each pollutant is steady or improving? | Click or tap here to enter text. |
| What was the cause when goals for measurement uncertainty per 40 CFR Part 58 Appendix A were not met? | Click or tap here to enter text. |
| Have all deficiencies indicated on the previous TSA report been corrected? If no, please list and explain. | Click or tap here to enter text. |
| What are your agency’s plans for quality improvement? | Click or tap here to enter text. |

## External Performance Audits

|  |  |  |
| --- | --- | --- |
| **Question** | **Response** | **Comment** |
| Does your agency participate in the following external performance audits? If the agency does not participate, please explain why. | Click or tap here to enter text. |
| * NPAP
 | Choose an item. | Click or tap here to enter text. |
| * PM2.5
 | Choose an item. | Click or tap here to enter text. |
| * PEP
 | Choose an item. | Click or tap here to enter text. |
| * Pb-PEP
 | Choose an item. | Click or tap here to enter text. |
| * Pb Strip Audit
 | Choose an item. | Click or tap here to enter text. |
| * Ambient Air Protocol Gas Verification Program (AA\_PGVP)
 | Choose an item. | Click or tap here to enter text. |
| * Round Robin metal PT
 | Choose an item. | Click or tap here to enter text. |
| List other performance audit participation. | Click or tap here to enter text. |
| Who performs NPAP and PEP audits? | Click or tap here to enter text. |

# Network Management

**This section of the questionnaire completed by:** Click or tap here to enter name.

**Key Individuals:**

|  |  |
| --- | --- |
| **Title/Position** | **Name** |
| Click or tap here to enter text. | Click or tap here to enter text. |

## Network Design

For monitoring organizations and agencies that do *not* submit the annual network plan required by 40 CFR 58.10, please complete the table below. For those that do submit an annual network plan, proceed to section b.

|  |  |  |  |
| --- | --- | --- | --- |
| **Site Name** | **AQS Site ID #** | **Pollutants Monitored** | **Proposed Changes** |
|
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |
|

## Siting

### b.1 Site Evaluations

Complete the following table.

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Comment** |
| Does the current level of monitoring effort, station placement, instrumentation, etc., meet requirements imposed by current grant conditions? |[ ] [ ]  Click or tap here to enter text. |
|  |  |  |  |
|  |  |  |  |
| Are there any issues?  |[ ] [ ]  Click or tap here to enter text. |
| How often are site evaluations for 40 CFR Part 58 Appendix E criteria conducted? | Frequency: | Click or tap here to enter text. |
|  | Date of last review: | Click or tap to enter a date. |

### b.2 Site Non-Conformance

Please list any monitors with siting non-conformances, the AQS ID numbers for those monitors, the type of non-conformance and the reason(s) for the non-conformance. If none of your agency’s monitors have siting non-conformances, proceed to section c. Waivers.

|  |  |  |  |
| --- | --- | --- | --- |
| **Monitor** | **AQS Site ID #** | **Type of Non-Conformance** | **Reason(s) for Non-Conformance** |
| Choose an item. | Click or tap here to enter text. | Choose an item. | Click or tap here to enter text. |

## Waivers

### c.1 Waiver Questions

Complete the following table.

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Comment** |
| Does your agency have any waivers? |[ ] [ ]  Click or tap here to enter text. |
| Does your agency plan to request any waivers? If yes, identify waivers in the Comment section. |[ ] [ ]  Click or tap here to enter text. |
| Has your agency obtained necessary waiver provisions to operate equipment which does not meet the effective reference and equivalency requirements? |[ ] [ ]  Click or tap here to enter text. |
|  |  |  |  |
|  |  |  |  |
| Do any sites vary from the required frequency in 40 CFR Part 58.12? |[ ] [ ]  Click or tap here to enter text. |
|  |  |  |  |
| Does the number of collocated monitoring stations meet the requirements of 40 CFR Part 58 Appendix A?  |[ ] [ ]  Click or tap here to enter text. |
|  |  |  |  |

### c.2 Waiver Types

Indicate any waivers requested or granted by the Regional Office, and provide waiver documentation. If your agency does not have any waivers, proceed to section d. Documentation

|  |  |
| --- | --- |
| **Waiver Type** | **Reason** |
| Choose an item. | Click or tap here to enter text. |

## Documentation

Complete the following table.

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Comment** |
| Are hard copy or electronic site information files retained by the agency for all air monitoring stations within the network? |[ ] [ ]  Click or tap here to enter text. |
|  |  |  |  |
|  |  |  |  |
| Does each station have the required information including: |
| AQS Site ID Number? |[ ] [ ]  Click or tap here to enter text. |
| Photographs of the four cardinal compass points? |[ ] [ ]  Click or tap here to enter text. |
| Startup and shutdown dates? |[ ] [ ]  Click or tap here to enter text. |
| Documentation of instrumentation? |[ ] [ ]  Click or tap here to enter text. |
| Who has custody of the current network documents | **Name:** Click or tap here to enter text. | Click or tap here to enter text. |
|  | **Title:**Click or tap here to enter text. | Click or tap here to enter text. |

# Field Operations

**This section of the questionnaire completed by:** Click or tap here to enter name.

**Key Individuals (e.g., Field Manager, Field Supervisor, Field QA Manager, etc.):**

|  |  |
| --- | --- |
| **Title/Position** | **Name** |
| Click or tap here to enter text. | Click or tap here to enter text. |

## Field Support

Complete the following table.

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Comment** |
| On average, how often are most of your stations visited by a field operator? | Click or tap here to enter text. |
| Is this visit frequency consistent for all data collecting organizations within your agency? |[ ] [ ]  Click or tap here to enter text. |
| On average, how many stations does a single operator have responsibility for? | Click or tap here to enter text. |
| How many sites (SLAMS/NCORE) have sampling manifold? | Click or tap here to enter text. |
| Do the sample inlets and/or manifolds meet the requirements for through-the-probe audits? |[ ] [ ]  Click or tap here to enter text. |
| * Briefly describe the most common manifold type
 | Click or tap here to enter text. |
| * How often are manifolds cleaned?
 | Click or tap here to enter text. |
| * Is there a conditioning period for the manifold cleaning?
 |[ ] [ ]  Click or tap here to enter text. |
| * Are manifolds equipped with a blower?
 |[ ] [ ]  Click or tap here to enter text. |
| * Is there sufficient air flow through the manifold/sampling lines at all times?
 |[ ] [ ]  Click or tap here to enter text. |
| * How is the air flow through the manifold/sampling line monitored?
 | Click or tap here to enter text. |
| * What is the average residence time?
 | Click or tap here to enter text. |
| * How often is the residence time calculated?
 | Click or tap here to enter text. |
| Sampling lines:1. What material is used for instrument sampling lines?
 | Click or tap here to enter text. |
| 1. How often are sampling lines changed?
 | Click or tap here to enter text. |
| Do you utilize uninterruptable power supplies or backup power sources at your sites? |[x] [ ]  Click or tap here to enter text. |
| What instruments or devices are protected? | Click or tap here to enter text. |

## Instrument Acceptance

### b.1 Instrumentation

Please list the instruments in your inventory.

|  |  |  |  |
| --- | --- | --- | --- |
| **Pollutant** | **Number of Instruments** | **Make and Models** | **Reference or Equivalent Number** |
| Choose an item. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |

### b.2 Instrument Needs

Please list your instrument needs in order of priority.

 Click or tap here to enter text.

## Calibration

### c.1 Calibration Frequency and Methods

Please indicate the frequency and method of multi point calibrations.

|  |  |  |  |
| --- | --- | --- | --- |
| **Pollutant** | **Frequency** | **Calibration Method:****Back of Instrument** | **Calibration Method: Through the Probe** |
| Choose an item. | Click or tap here to enter text. |[ ] [ ]

### c.2 Calibration Questions

Please complete the following table.

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Comment** |
| How are field calibration procedures documented and how are the results recorded? | Click or tap here to enter text. |
| Are calibrations performed in keeping with the guidance in Vol. II of the QA Handbook? |[ ] [ ]  Click or tap here to enter text. |
| Are calibration procedures consistent with the operational requirements of Appendices to 40 CFR Part 50 or to analyzer operation/instruction manuals? |[ ] [ ]  **If no, why not?** Click or tap here to enter text. |
| Have changes been made to calibration methods based on manufacturer’s suggestions for a particular instrument? |[ ] [ ]  Click or tap here to enter text. |
| Do standards used for calibrations meet the requirements of appendices to 40 CFR 50 (EPA reference methods) and Appendix A to 40 CFR 58 (traceability of materials to NIST, SRMs or CRMs)? |[ ] [ ]  **Comment on deviations.** Click or tap here to enter text. |
| Are all flow-measurement devices NIST-traceable? |[ ] [ ]  Click or tap here to enter text. |

## Certification

### d.1 Flow Devices

Please list the authoritative standards used for each type of flow measurement, and indicate the certification frequency of standards to maintain field material/device credibility.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Flow Device** | **Serial Number** | **Primary Standard** | **Certification Frequency** | **Use (calibration, audit, or spare)** |
| Choose an item. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Choose an item. |

### d.2 Certification Questions

Please complete the following table.

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No**  | **Comment** |
| How are certifications performed? (internally, by a vendor, or third party?) | Click or tap here to enter text. |
| Where do field operations personnel obtain gas standards? | Click or tap here to enter text. |
| How are the gas standards verified after receipt? | Click or tap here to enter text. |
| What equipment is used to perform calibrations (e.g., dilution devices) | Click or tap here to enter text. |
| Do the dilution air flow control and measurement devices conform to CFR requirements? |[ ] [ ]  Click or tap here to enter text. |
| What traceability is used? | Click or tap here to enter text. |
| Is calibration equipment maintained at each station? |[ ] [ ]  Click or tap here to enter text. |
| How is the functional integrity of this equipment documented? | Click or tap here to enter text. |
| Who has responsibility for maintaining field calibration standards? | Click or tap here to enter text. |

\***Please provide copies of certifications of all standards currently in use from your master and/or satellite certification logbooks (i.e., chemical, gas, flow, and zero air standards).**

### d.3 Ozone Traceability Diagram

\***Please provide a flow diagram establishing traceability from the SRP (Level 1) to the ozone transfer standards used in your network.**

****

### d.3 Calibrator Certification

Please list the authoritative standards and frequency of each type of dilution, permeation and ozone calibrator and indicate certification frequency.

|  |  |  |
| --- | --- | --- |
| **Calibrator** | **Primary Standard** | **Frequency of Certification/Calibration** |
| Choose an item. | Click or tap here to enter text. | Click or tap here to enter text. |

## Repair

Complete the following table.

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Comment** |
| Who is responsible for performing preventive maintenance? | Click or tap here to enter text. |
| Is special training provided to them for performing preventive maintenance? Briefly comment on background or courses. |[ ] [ ]  Click or tap here to enter text. |
| What is the preventive maintenance schedule for each type of field instrumentation? | Click or tap here to enter text. |
| If preventive maintenance is MINOR, it is performed at (check one or more)[ ] Field Station [ ] Headquarters Facilities [ ] Manufacturer [ ] PQAO | Click or tap here to enter text. |
| If preventive maintenance is MAJOR, it is performed at (check one or more)[ ] Field Station [ ] Headquarters Facilities [ ] Manufacturer [ ] PQAO | Click or tap here to enter text. |
| Does the agency have service contracts or agreements in place with instrument manufacturers? Indicate in the Comment section or attach additional pages to show which instrumentation is covered. |[ ] [ ]  Click or tap here to enter text. |
| Comment briefly on the adequacy and availability of the supply of spare parts, tools, and manuals available to the field operator to perform any necessary maintenance activities. Do you feel that this is adequate to prevent any significant data loss? |[ ] [ ]  Click or tap here to enter text. |
| Is the agency currently experiencing any recurring problem with equipment or manufacturer(s)? If so, please identify the equipment or manufacturer, and comment on steps taken to remedy the problem. |[ ] [ ]  Click or tap here to enter text. |

## Record Keeping

Complete the following table.

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Comment** |
| What type of station logbooks are maintained at each monitoring station? (maintenance logs, calibration logs, personal logs, etc.) | Click or tap here to enter text. |
| What information is included in the station logbooks? | Click or tap here to enter text. |
| Who reviews and verifies the logbooks for adequacy of station performance? | Click or tap here to enter text. |
| How is control of logbook maintained? | Click or tap here to enter text. |
| Where is the completed logbook archived? | Click or tap here to enter text. |
| What other records are used? (Use drop-down menu below). Comment on the use and storage of these documents. | Click or tap here to enter text. |
| Choose an item. | Click or tap here to enter text. |
| Are calibration records (or calibration constants) available to field operators? |[ ] [ ]  Click or tap here to enter text. |

\***Please attach an example field calibration record sheet.**

# 5. Laboratory Operations

**This section of the questionnaire completed by:** Click or tap here to enter name.

**Laboratory Name:**

Laboratory Name

**Laboratory Address:**

Laboratory Address

**Key Individuals (e.g., Laboratory Manager, Laboratory Supervisor, Laboratory QA Manager, etc.):**

|  |  |
| --- | --- |
| **Title/Position** | **Name** |
| Click or tap here to enter text. | Click or tap here to enter text. |

## Routine Operation

### a.1 Methods

In the table below, identify which of the following analyses are performed in the laboratory and state the method used to conduct the analyses.

|  |  |
| --- | --- |
| **Pollutant** | **Method** |
| Choose an item. | Click or tap here to enter text. |

Please describe areas where there have been difficulties meeting the regulatory requirements for any of the above methods.

Click or tap here to enter text.

### a.2 Quality System

Complete the following table.

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Comment** |
| Are procedures for the methods listed in section a.1 included in the agency’s QA Project Plan? |[ ] [ ]  Click or tap here to enter text. |
| Have the laboratory SOPs been reviewed and approved? If yes, in the comment section, indicate by who (EPA, PQAO, etc.)? |[ ] [ ]  Click or tap here to enter text. |
| Are SOPs easily and readily accessible for use and reference within the laboratory? If not, where are the documents stored? |[ ] [ ]  Click or tap here to enter text. |
| Does the lab have sufficient instrumentation to conduct the analyses? |[ ] [ ]  Click or tap here to enter text. |
| Are separate facilities maintained for weighing the different sample types? (e.g., hi-volume vs low-volume), or is one weighing room utilized for all samples? Describe.  |[ ] [ ]  Click or tap here to enter text. |
| Does your laboratory hold certifications? (EPA, NIST, State, NELAC, or other) |[ ] [ ]  Click or tap here to enter text. |
| Does your laboratory operate under a Quality Assurance Manual or equivalent document? |[ ] [ ]  Click or tap here to enter text. |
| Does your laboratory participate in performance evaluation programs? |[ ] [ ]  Click or tap here to enter text. |
| Does your laboratory have a corrective action process for non-conforming work? |[ ] [ ]  Click or tap here to enter text. |
| Does your laboratory have a laboratory staff person assigned the role of Quality Assurance Officer? |[ ] [ ]  Click or tap here to enter text. |

Please describe needs for laboratory instrumentation.

Click or tap here to enter text.

## Laboratory Quality Control

### b.1 Standards

Please identify the equipment and standards used in support of the gravimetric laboratory, including any quality assurance standards (such as additional weight sets or portable RH/temperature probes).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Device** | **Pollutant** | **Brand (Make)** | **Model (Class)** | **Calibration/Certification Expiration Date** |
| Choose an item. | Choose an item. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap to enter a date. |

\***Please have calibration/certification records available for all laboratory standards.**

### b.2 Laboratory Temperature and Relative Humidity

Complete the following table.

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Comment** |
| What is the accuracy specification and recording time (e.g., 5 min. averaging time) of the temperature sensor (logger) used in the gravimetric laboratory? | Click or tap here to enter text. |
| What is the accuracy specification and recording time (e.g., 5 min. averaging time) of the RH sensor (logger) used in the gravimetric laboratory? | Click or tap here to enter text. |
| What is the accuracy specification for any RH/temp audit device used in the laboratory, if applicable? | Click or tap here to enter text. |
| Does the laboratory utilize an IR gun to obtain sample shipment temperatures? |[ ] [ ]  Click or tap here to enter text. |
| * If yes, is the IR gun NIST-traceable? Provide the certification expiration date.
 |[ ] [ ]  Click or tap here to enter text. |
| If the laboratory does not utilize an IR gun, what device is used to obtain shipment temperature? Please describe its traceability and provide a certification expiration date. | Click or tap here to enter text. |

## Laboratory Preventive Maintenance

Complete the following table.

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Comment** |
| Is preventive maintenance performed on laboratory equipment? If so, who has the responsibility for performing preventive maintenance? |[ ] [ ]  Click or tap here to enter text. |
| If equipment maintenance is performed by laboratory staff, does the SOP detail the procedures to be followed? Provide the SOP title, date, and revision number where the procedures are found. |[ ] [ ]  Click or tap here to enter text. |
| Is a maintenance log maintained for the balance? |[ ] [ ]  Click or tap here to enter text. |
| Are service contracts in place for the balance? |[ ] [ ]  Click or tap here to enter text. |
| If utilizing a weighing room, are service contracts in place for the climate control unit/HVAC? |[ ] [ ]  Click or tap here to enter text. |
| Describe static control equipment utilized in the weighing room, if applicable. | Click or tap here to enter text. |
| Does the weighing room undergo routine cleaning activities? On what frequency? |[ ] [ ]  Click or tap here to enter text. |
| Briefly describe the weighing room cleaning procedure. | Click or tap here to enter text. |

## Laboratory Record Keeping

Complete the following table.

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Comment** |
| Are all samples that are received by the laboratory logged in? |[ ] [ ]  Click or tap here to enter text. |
| Discuss sample routing (or attach a copy of the latest SOP which covers this). Attach a flow chart on the next page, if possible. | Click or tap here to enter text. |
| For the following 4 questions, select the medium used to document various activities enlisted. If the medium is not listed, select “Other” and list the medium. If the information is not recorded, select “N/A”. |
| * Environmental conditions, weighing session results, balance checks, and weight checks?
 | Choose an item. |
| * Serial numbers of filters prepared for the field?
 | Choose an item. |
| * Serial number of filters returning from the field for analysis?
 | Choose an item. |
| * General information about daily lab activities, preventive maintenance procedures, and/or other significant events in the laboratory that may impact data quality or the data record?
 | Choose an item. |
| How are data records from the laboratory archived? | Click or tap here to enter text. |
| * Where?
 | Click or tap here to enter text. |
| * Who has the responsibility? (identify person/position)
 | Click or tap here to enter text. |
| How long are records kept? Indicate the number of months/years. | Click or tap here to enter text. |
| Does the laboratory SOP contain procedures for sample chain-of-custody (COC)? |[ ] [ ]  Click or tap here to enter text. |
| * If yes, indicate the title, date, and revision number, and where it can be found.
 | Click or tap here to enter text. |
| What type of COC record accompanies the samples? | Click or tap here to enter text. |
| Does the laboratory maintain original COCs or copies? |[ ] [ ]  Click or tap here to enter text. |
| Where are COCs filed? | Click or tap here to enter text. |

**\*If possible, attach a sample routing flow chart:**



## Laboratory Data Acquisition and Handling

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Comment** |
| Identify those laboratory instruments (e.g., balances, temperature/RH loggers, etc.) which make use of computer interfaces directly to record data. | Click or tap here to enter text. |
| Are QC data results readily available to the analyst during a weigh session? |[ ] [ ]  Click or tap here to enter text. |
| Do RH/temperature loggers record values using paper chart records (chart wheels)? If yes, where are the paper charts maintained? Are they signed and dated? |[ ] [ ]  Click or tap here to enter text. |
| What is the laboratory’s capability with regards to data recovery? In case of problems, can the laboratory recapture data that may be lost in the event of computer failure? Discuss briefly. | Click or tap here to enter text. |
| Does the laboratory maintain an SOP that discusses how to use the laboratory’s data acquisition instrumentation? If yes, please provide the SOP title, date, and revision number. |[ ] [ ]  Click or tap here to enter text. |

\***Please attach a flow chart/diagram which illustrates the transcriptions, verifications, validations, and reporting processes the data goes through before being released by the laboratory.**

****

## Filter Questions

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Comment** |
| Does the agency use filters supplied by EPA? |[ ] [ ]  Click or tap here to enter text. |
| If the answer to the above question is No, do the filters utilized meet the specifications in 40 CFR Part 50? Who is the vendor? Be prepared to provide documentation to demonstrate acceptance testing results. |[ ] [ ]  Click or tap here to enter text. |
| Are unexposed filters visually inspected via strong light from a view box for pinholes and other imperfections? |[ ] [ ]  Click or tap here to enter text. |
| Are unexposed filters equilibrated in a controlled conditioning environment which meets or exceeds the requirements of 40 CFR Part 50? Describe the conditioning room/chamber. |[ ] [ ]  Click or tap here to enter text. |
| How long is the conditioning period? | Click or tap here to enter text. |
| Briefly describe how exposed filters are prepared for conditioning. | Click or tap here to enter text. |
| Are exposed filters reconditioned in the same conditioning environment as the unexposed filters? |[ ] [ ]  Click or tap here to enter text. |
| Are the temperature and relative humidity of the conditioning environment (i.e., weigh room or conditioning chamber) monitored? What is the resolution of the data collected (e.g., 1-minute, 5-minute, 1-hour, etc.)? |[ ] [ ]  Click or tap here to enter text. |
| How often are balance checks performed? | Click or tap here to enter text. |
| Do the weights (mass reference standards) bracket the weights of the filters being utilized? What are the masses of the weight standards used? |[ ] [ ]  Click or tap here to enter text. |
| To what sensitivity are filter weights recorded? | Click or tap here to enter text. |
| Are filters packaged for protection to and from the laboratory? |[ ] [ ]  Click or tap here to enter text. |
| On average, what is the elapsed time in hours between the end of sampling and laboratory receipt? | Click or tap here to enter text. |
| In what medium are field measurements recorded (e.g., in a log book, on a filter form, or on standard forms)? | Click or tap here to enter text. |
| Briefly describe how and where exposed filters are stored after being weighed. | Click or tap here to enter text. |
| On what frequency are lab blanks utilized? | Click or tap here to enter text. |
| Are chemical analyses performed on filters? If yes, which? Where are these additional analyses performed? |[ ] [ ]  Click or tap here to enter text. |

## Metals & Other Analyses

If your laboratory completes lead (Pb) and/or other metals analyses, please complete the tables in this section.

### e.1 Laboratory QA/QC

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Comment** |
| Are at least one duplicate, one blank, and one standard or spike included with a given analytical batch? |[ ] [ ]  Click or tap here to enter text. |
| Briefly describe the laboratory’s use of data derived from blank analyses. | Click or tap here to enter text. |
| Are criteria established to determine whether blank data are acceptable? |[ ] [ ]  Click or tap here to enter text. |
| How frequently and at what concentration ranges does the lab perform duplicate analyses? What constitutes an acceptable agreement? | Click or tap here to enter text. |
| Please describe how the lab uses data obtained from spiked samples, including the acceptance criteria (e.g., acceptable percent recovery). | Click or tap here to enter text. |
| Does the laboratory include samples of reference material within an analytical batch? If yes, indicate frequency, level, and material used. |[ ] [ ]  Click or tap here to enter text. |
| Are mid-range standards included in analytical batches? If yes, describe the frequency, level, and compound. |[ ] [ ]  Click or tap here to enter text. |
| Are criteria for real time quality control established that are based on the results obtained for the mid-range standards discussed above? If yes, briefly discuss them below or indicate the document in which they can be found. |[ ] [ ]  Click or tap here to enter text. |
| Are appropriate acceptance criteria for each type of analysis documented? |[ ] [ ]  Click or tap here to enter text. |

### e.2 Chemicals

Complete the following table.

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Comment** |
| Are all chemicals and solutions clearly marked with an indication of shelf life? |[ ] [ ]  Click or tap here to enter text. |
| Are chemicals removed and properly disposed of when the shelf life expires? |[ ] [ ]  Click or tap here to enter text. |
| Does the laboratory purchase standard solutions such as those for use with lead or other metals analyses? |[ ] [ ]  Click or tap here to enter text. |
| Are only ACS grade chemicals used by the laboratory? |[ ] [ ]  Click or tap here to enter text. |
| Comment on the traceability of chemicals used in the preparation of calibration standards. | Click or tap here to enter text. |

### e.3 Pb

|  |  |  |
| --- | --- | --- |
| **Question** | **Response** | **Comments** |
| Is Pb analysis performed by a contract laboratory? If yes, provide the laboratory name in the comment section. | Choose an item. | Click or tap here to enter text. |
| What filter media is used for Pb analysis? | Choose an item. | Click or tap here to enter text. |
| Are filter samples visually inspected for defects (e.g., pinholes, tears and non-uniform deposit)? | Choose an item. | Click or tap here to enter text. |
| Are filters invalidated if defects are found? If no, why not? | Choose an item. | Click or tap here to enter text. |
| Are tweezers used to handle filters? If yes, what material are the tweezers made of (ex. Teflon, plastic, metal, etc.)? | Choose an item. | Click or tap here to enter text. |
| What extraction method is used for filters? | Choose an item. | Click or tap here to enter text. |
| What reagents are used to clean glassware? | Click or tap here to enter text. |
| List standards used for analysis. | Click or tap here to enter text. |
| Are filter lot blanks analyzed for Pb content at a rate of 20 to 30 random filters per batch of 500 or greater? ***Only for filters not provided by EPA.***  | Choose an item. | Click or tap here to enter text. |
| How often are MDLs determined? | Click or tap here to enter text. |
| How many replicates used for MDLs? | Click or tap here to enter text. |
| Are MDLs calculated in accordance with 40 CFR Part 136, Appendix B? If not, why not? | Choose an item. | Click or tap here to enter text. |
| Are waste HNO3, HCL, and solutions containing these reagents and/or Pb placed in labeled bottles and delivered to a commercial firm that specializes in removal of hazardous waste? | Choose an item. | Click or tap here to enter text. |

# Data & Data Management

**This section of the questionnaire completed by:** Click or tap here to enter name.

**Key Individuals:**

|  |  |
| --- | --- |
| **Title/Position** | **Name** |
| Click or tap here to enter text. | Click or tap here to enter text. |

## Data Handling

Complete the following table.

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Comment** |
| Is there a procedure, description, or a chart which shows a complete data sequence from point of acquisition to point of submission of data to EPA? |[ ] [ ]  Click or tap here to enter text. |
| Are procedures for data handling (e.g., data reduction, review, etc.) documented? If yes, comment on where. |[ ] [ ]  Click or tap here to enter text. |
| In what media (e.g., flash drive, telemetry, wireless, etc.) and formats do data arrive at the data processing location? | Click or tap here to enter text. |
| How often are data received at the processing location from the field sites and laboratory? | Click or tap here to enter text. |
| Are there any activities being done before data is released to agency internal data processing? |[ ] [ ]  Click or tap here to enter text. |
| How are data entered to the computer system? (e.g., computerized transcription, manual entry, digitization of strip charts, or other)? | Click or tap here to enter text. |
| For manual data, is a double-key entry system used? |[ ] [ ]  Click or tap here to enter text. |

**\*Please provide a data flow diagram indicating the data flow within the reporting organization.**



## Software Documentation

Complete the following table.

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Comment** |
| Does your agency use an AQS Manual? |[ ] [ ]  Click or tap here to enter text. |
| Does the agency have information on the reporting of precision and accuracy data available? |[ ] [ ]  Click or tap here to enter text. |
| What software is used to prepare air monitoring data for release into the AQS and AirNow databases? Include the names of the software packages, vendor or author, revision numbers, and the revision dates of the software. |[ ] [ ]  Click or tap here to enter text. |
| What is the recovery capability in the event of a significant computer problem (i.e., how much time and data would be lost)? |[ ] [ ]  Click or tap here to enter text. |
| Has your agency tested the data processing software to ensure its performance of the intended function are consistent with the QA Handbook Volume II, Section 14.0? |[ ] [ ]  Click or tap here to enter text. |
| Does your agency document software tests? **If yes, provide the documentation.** |[ ] [ ]  Click or tap here to enter text. |

## Data Validation and Correction

Complete the following table.

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Comment** |
| Is there documentation in regards to data that has been identified as suspect and subsequently flagged? |[ ] [ ]  Click or tap here to enter text. |
| Please describe what action the data validator will take (e.g., flags, invalidate, etc.) if they find data with exceeded QC criteria. | Click or tap here to enter text. |
| Please describe how changes made to data that were submitted to AQS and AirNow are documented. | Click or tap here to enter text. |
| Who has signature authority for approving corrections? | **Name:**Click or tap here to enter text.**Program Function:**Click or tap here to enter text. |
| What criteria are used to determine a data point be deleted or invalidated?  | Click or tap here to enter text. |
| What criteria are used to determine if data need to be reprocessed? | Click or tap here to enter text. |
| Are corrected data resubmitted to the issuing group/record generator for cross-checking prior to release? |[ ] [ ]  Click or tap here to enter text. |

## Data Processing

### d.1 Reports

Complete the following table.

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Comment** |
| Does the agency generate data summary reports? |[ ] [ ]  Click or tap here to enter text. |
| Please list at least three reports routinely generated, including the information requested below. | Click or tap here to enter text. |
| **Report Title** | **Distribution** | **Period Covered** |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |

### d.2 Data Submission

Complete the following table.

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Comment** |
| How often are data submitted to AQS? | Click or tap here to enter text. |
| How often are data submitted to AirNow? | Click or tap here to enter text. |
| Briefly comment on difficulties the agency may have encountered in coding and submitting data following the AQS guidelines. | Click or tap here to enter text. |
| Does the agency retain a hard copy printout of submitted data from AQS? |[ ] [ ]  Click or tap here to enter text. |
| Are records kept by the agency for at least 3 years in an orderly, accessible form? If yes, does this include: |[ ] [ ]  Click or tap here to enter text. |
| * Raw data
 |[ ] [ ]  Click or tap here to enter text. |
| * Calculations
 |[ ] [ ]  Click or tap here to enter text. |
| * QC data
 |[ ] [ ]  Click or tap here to enter text. |
| * Reports: list which reports are used
 |[ ] [ ]  Click or tap here to enter text. |
| Has your agency submitted data (along with the appropriate calibration equations used) to the processing center? |[ ] [ ]  Click or tap here to enter text. |
| Are concentrations of PM10 corrected to EPA standard temperature and pressure conditions (i.e., 298 K, 760 mm Hg) before input to AQS? |[ ] [ ]  Click or tap here to enter text. |
| Are concentrations of PM2.5 and Pb reported to AQS under actual (volumetric) conditions? |[ ] [ ]  Click or tap here to enter text. |
| Are audits on data reduction procedures performed on a routine basis? If yes, at what frequency? |[ ] [ ]  Click or tap here to enter text. |
| Are data precision and accuracy checked each time they are calculated, recorded, or transcribed to ensure that incorrect values are not submitted to EPA? |[ ] [ ]  Click or tap here to enter text. |

## Internal Reporting

### e.1 Reports

What internal reports are prepared and submitted as a result of the audits required under 40 CFR Part 58, Appendix A?

|  |  |
| --- | --- |
| **Report Title** | **Frequency** |
| Click or tap here to enter text. | Click or tap here to enter text. |

What internal reports are prepared and submitted as a result of precision checks also required under 40 CFR Part 58, Appendix A?

|  |  |
| --- | --- |
| **Report Title** | **Frequency** |
| Click or tap here to enter text. | Click or tap here to enter text. |

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Comment** |
| Do either the audit or precision check reports indicated include a discussion of corrective actions initiated based on audit or precision check results? |[ ] [ ]  Click or tap here to enter text. |

### e.2 Responsibilities

Who has the responsibility for the calculation and preparation of data summaries? To whom are such summaries delivered?

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Title** | **Type of Report** | **Recipient** |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |

Identify the individuals within the agency responsible for reviewing and releasing the data.

|  |  |
| --- | --- |
| **Name** | **Program Function** |
| Click or tap here to enter text. | Click or tap here to enter text. |

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Yes** | **No** | **Comment** |
| Does your agency report to the Air Quality Index (AQI)? |[ ] [ ]  Click or tap here to enter text. |
| Is data certification signed by a senior officer of your agency? |[ ] [ ]  Click or tap here to enter text. |

1. *QA Handbook Volume II*, Appendix D Validation Templates; *Handbook for Air Pollution Measurement Systems*, Appendix C Validation Templates; *Quality Assurance Handbook for Air Pollution Measurement Systems: Volume IV: Meteorological Measurements Version 2.0* [↑](#footnote-ref-1)