

# QAPP Checklist

South Coast AQMD previously provided (August 2020) a checklist for key elements to be included in the QAPP. This completed checklist is included below.

**Table A-1.** QAPP Checklist provided by South Coast AQMD.

Element	Included	Not Included / Not Applicable	Comment
Name of organization implementing the project	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Page 1
Title and version/revision number	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Page 1
Signature placeholders for approval (e.g., facility personnel, contractor, South Coast AQMD staff, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Page 3
Statement that the QAPP is a living document and will be updated/modified as the Rule 1180 program develops or as a result of independent audit recommendations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Page 3
<b>Table of Contents</b>			
List of required QAPP chapters and sections including Appendices	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Pages 4 and 5
List(s) of tables and figures	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Page 6
Header illustrating document control format	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Throughout document
<b>Distribution / Notification List</b>			
Names/titles of key personnel (including contractors and relevant South Coast AQMD staff) who will receive original and updated copies of the QAPP	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Page 8

Contact information for key facility personnel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Table 1
<b>Project / Task Organization</b>			
Identification of the location(s) where the official version of the QAPP is housed (e.g., agency website, LAN, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Page 7
The organizational structure of project personnel. Should include independent quality assurance (QA) management function to accomplish QA objective of the project	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Figure 1
The chain-of-command / lines of communication amongst key personnel. Include delegations of authority if/where appropriate.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.4
Responsibilities of contractors / subcontractors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.4
Lines of communication with contractors / subcontractors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.4
Identify who is primarily responsible for making changes to monitors within the fenceline air monitoring system (i.e., install, discontinue, replace, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.4
Identify who is primarily responsible for developing the QAPP (including document updates and future revisions, as this is a living document)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Page 7 and Section A.4
Identify who is primarily responsible for developing the Quarterly Data Summary Reports	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.4
Identify who is primarily responsible for the overall quality of the project's data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.4
Specify who verifies and validates the data (e.g., QA staff; field technician)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.4

Specify who manages the QAPP and related documents and records (e.g., QA Manager, records custodian)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sections A.4 and A.9
Identify who is responsible for writing/revising/maintaining the QAPP/SOPs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.4
Identify who is responsible for communicating and distributing QAPP/SOP revisions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.4
Identify who is the designated Data System Administrator	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.4
Identify who operates, calibrates, and performs required QC checks on analyzers/samplers	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.4
Identify who collects physical samples, if necessary (e.g. for back-up monitoring)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Physical sampling is not proposed in the FAMP.
Identify who performs preventive maintenance and/or instrument repairs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.4
Identify who tracks and orders equipment for the project, and who tracks inventory and orders supplies and consumables	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.8
Identify who conducts instrument performance audits	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.4
Identify who conducts systems audits	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.4
Identify who performs data quality assessments	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sections A.4 and D.2
Identify who verifies data quality	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sections A.4 and D.2
Identify who tracks the completion of corrective actions and who assesses the success of corrective actions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section D.2
Identify who oversees training	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.8
Identify any other relevant tasks performed by contractors and subcontractors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.4

Project Definition / Background			
The background/history/description of the Rule 1180 and Fenceline Air Monitoring	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.5
List of pollutant(s) measured by the fenceline system and point monitors	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.5
Review cycle for the QAPP and associated SOPs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Page 7
Project / Task Description			
Summary of the monitoring objective(s)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.5
Describe the work required to collect, document, and report the ambient monitoring data. Include a summary of the typical fenceline monitoring activities to be performed and measurements to be taken.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B
Describe significant project milestones and timelines	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section C.2
Summary of the QA oversight and responsibilities, and of the required assessments, schedule, and personnel responsible for completing them	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sections A.4, D.1, and D.2
Critical documents and records to be maintained	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.9
Quality Objectives and Criteria for Measurement Data			
Statement of the intended use of the data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.7
Description of the process used to develop the DQOs	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.7
Include a table with MQOs for all the specific pollutants covered by the QAPP. Explain why the chosen MQOs are adequate for the purpose of fenceline monitoring	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Table 3
Define all quantitative Data Quality Indicators (DQI) (precision, bias, accuracy, completeness, and sensitivity)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.7

For each DQI, explain how the facility measures these specific metrics	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.7
Explain how data representativeness and comparability are achieved/addressed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.7
Include all relevant statistical reporting units	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.7
<b>Training</b>			
Describe relevant training and courses taken by facility personnel (e.g., data review, verification and validation activities, and other QA training/courses)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.8
Required training material for staff and personnel working on this project (e.g., the QAPP, SOPs, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.8
Training frequency	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.8
<b>Documentation and Records</b>			
Describe the organization's document control system	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.9
List of critical documents that are controlled by the organization (e.g., QAPP, SOPs, OAGs, blank data entry forms, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.9
Specify location(s) of controlled documents	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.9
Specify protocols for QAPP/SOP revisions and distribution to staff	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.9

<p>List of critical records generated and maintained as part of this project. <i>Examples to look for may include:</i></p> <ul style="list-style-type: none"> <li>• <i>Field QA / QC records</i></li> <li>• <i>Data collection records</i></li> <li>• <i>Logbooks</i></li> <li>• <i>Chain of custody records</i></li> <li>• <i>Field maintenance records</i></li> <li>• <i>Audit reports (internal and external)</i></li> <li>• <i>Corrective action records</i></li> <li>• <i>Other QA / QC records</i></li> <li>• <i>Commercial or in-house databases or spreadsheets</i></li> <li>• <i>Training records</i></li> <li>• <i>Monitoring site files (photographs, measurements, addresses, lease agreements, etc.)</i></li> <li>• <i>Emails that include important monitoring information</i></li> </ul>	☒	☐	Section A.9
Documentation and maintenance guidelines for electronic and handwritten/hardcopy records	☒	☐	Section A.9
Procedures for correcting data (handwritten and electronic)	☒	☐	Section A.9
A discussion of document / record security procedures (e.g., restricted access, etc.)	☒	☐	Section A.9
Specific location(s) where documents are filed and archived, especially QAPPs / SOPs	☒	☐	Section A.9
Description of records retention policy	☒	☐	Section A.9
Back-up procedures for records (both hardcopy and electronic)	☒	☐	Section A.9
<b>Fenceline System Description</b>			
Description of fenceline system objectives	☒	☐	Section B.1

Description of fence-line monitoring locations (including maps)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.1
Description of pollutants monitored at each location	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.5 and Table 2
Monitoring schedule and frequency	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sections B.2 and D.2
Description of the measurement method for each pollutant monitored	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.2
SOP(s) for each measurement method (reference in the QAPP and provide individual SOP documents)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Attachments 1–7
Description of shelter, reflector type, and reflector climate-control requirements	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.3
Information on potential monitor interferences and how they will be addressed (e.g., dust build-up)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.2
Protocols for making method changes (i.e., swapping out instruments) and/or corrections	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Attachments 1–7
<b>Quality Control Requirements</b>			
<b>Point Monitors</b>			
Describe calibration scale or range for calibration standards for each pollutant monitored	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.7
Calibration acceptance criteria	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sections A.7 and B.7
Calibration frequency	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sections A.7 and B.6
Calibration standards preparation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.7 and Attachments 3–6
Calibration blanks (if applicable)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.7 and Attachments 3–6
Calibration standard verification procedure and standard requirements (i.e., certification/traceability)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.8

Detailed description of the types of QC checks performed on all gaseous analyzers ( <b>includes manuals and automated procedures when appropriate</b> ). <i>Terminology may vary per organization; and, organizations typically perform more than one type of QC check on the gaseous analyzers. The description should include <b>discussions</b> of activities such as:</i> <ul style="list-style-type: none"> <li>• 1-point QC checks</li> <li>• Precision checks</li> <li>• Biweekly checks</li> <li>• Zero, Precision, Span checks</li> <li>• Multi-point verifications (MPVs)</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sections A.7, B.5, and D.2, and Attachment 8
Types of QC checks performed on point monitors (e.g., flow rate checks)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sections A.7, B.6, B.7 and Attachments 3–6
QC check concentration(s), range, and frequency	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.7 and Attachments 3–6
QC check acceptance criteria	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.7
Include calculations (formulae) for the various QC checks (when applicable)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.7 and Attachments 3–6
Provide examples of invalid QC checks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Attachments 3–6
<b>Open-Path Analyzers</b>			
Describe concentrations or concentration range for “bump test”/verification for each pollutant monitored	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.7
“Bump test”/verification acceptance criteria	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.7
“Bump test”/verification frequency	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sections A.7 and B.6
“Bump test”/verification standard preparation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.7 and Attachments 1–2
Standard verification procedure	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.8

Detailed description of the types of QC checks performed on all open-path ( <b>includes manuals and automated procedures when appropriate</b> ). <i>Terminology may vary per organization; and, it is recommended to perform more than one type of QC check on the open-path analyzers. The description should include <b>discussions</b> of activities such as:</i> <ul style="list-style-type: none"> <li>• 1-point or multi-point verification QC checks</li> <li>• Precision checks</li> <li>• Biweekly checks</li> <li>• Spectral validation/"goodness of fit" checks</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sections A.7, B.5, and D.2, and Attachment 8
Open-path QC checks acceptance criteria	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.7
Provide examples of invalid QC checks	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Attachments 1–2
<b>All Instruments</b>			
Description of the various types of instrument performance evaluations conducted by facility personnel and/or contractor	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.6
Instrument performance evaluation frequency	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.7
Audit levels for all instruments and rationale for selecting those concentrations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sections A.7 and B.7
Procedures to follow if QC checks exceed acceptance criteria or specifications	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.6 and Attachments 1–8
Documentation and reporting requirements	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sections A.9 and C.2
<b>Instrument / Equipment Testing, Inspection, and Maintenance Requirements</b>			
Describe performance acceptance testing procedures for new equipment (after receipt from vendor)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.6 and Attachments 1–7
Instrument performance acceptance testing SOPs (referenced in the QAPP and attached)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.6 and Attachments 1–7

Procedures to follow when new equipment does not meet purchase requirements or performance specifications	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.6 and Attachments 1–7
MDL testing / verification procedure	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Working with South Coast AQMD on guidance, Rule language interpretation, and promulgated protocols and methodologies. Working with manufacturer to understand possible fenceline monitoring system modifications and written promulgated protocols and methodologies. Facility is currently following procedures indicated the approved FAMP/QAPP.
General preventive maintenance activities for each instrument	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.6 and Attachments 1–7
Maintenance schedule and frequency	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.6 and Attachments 1–7
Frequency and activities of periodic inspection procedures (for sites, support equipment, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.6 and Attachments 1–7
Description of critical spare parts maintained	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Addressed in FAMP
Description of spare analyzers maintained	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Addressed in FAMP
Procedures for resolving potential deficiencies that have been identified during regular audits	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.6
<b>Instrument Calibration and Frequency</b>			
Calibration methods / procedures for point and open-path analyzers, and meteorological/visibility sensors. If already described in earlier sections, reference the appropriate Section of the QAPP	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.7 and Attachments 1–7

Types of standards and equipment used that need calibration / certification. <i>Examples:</i>			
<ul style="list-style-type: none"> <li>• <i>Gaseous Analyzers – MFCs within gas dilution calibrators; gas (source) cylinders</i></li> <li>• <i>Open-path Analyzers – “bump” test / verification / consistency checks</i></li> <li>• <i>Meteorological and visibility equipment – wind, visibility, RH, and temperature standards</i></li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.7 and Attachments 1–7
Procedures for certifying equipment performance, including performance testing upon receipt (SOPs; referenced in the QAPP and attached)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Attachments 1–7
<b>Data Management</b>			
Describe complete data flow path for all pollutants	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.10 and Attachment 8
Describe data flow from generation through reporting, illustrated using flow diagrams or other visuals	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.10 and Attachment 8
Description of how data are collected / recorded	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.10 and Attachment 8
Description of how and where data are stored, including raw, processed, validated, and auxiliary data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.10 and Attachment 8
Describe type(s) of data acquisition system in use	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.10 and Attachment 8
Describe types of data handling support equipment (computers, modems, wireless routers, etc.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.10 and Attachment 8
How and at what frequency data are transferred from the monitoring station to the central office / cloud	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.10 and Attachment 8
How data are aggregated	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.10 and Attachment 8
How data integrity is maintained	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.10 and Attachment 8

Describe the collection and management of analytical metadata	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.10 and Attachment 8
Procedures to process, compile, and analyze data (referenced in QAPP and attached in a specific SOP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.10 and Attachment 8
Procedures to verify and validate data (referenced in QAPP and attached in a specific SOP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section D and Attachment 8
The frequency and process for verifying the accuracy of data reporting	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section D and Attachment 8
Procedures to test or audit the acceptability of the hardware and software configurations	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.10 and Attachment 8
Personnel responsible for each data management task	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.4, Section D, and Attachment 8
Security measures (e.g., prevention of data modification or deletion)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.10 and Attachment 8
Data back-up procedures, including those for records stored on local hard drives	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.10 and Attachment 8
Final data repository	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.10 and Attachment 8
Data retention time frames	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section B.10 and Attachment 8
<b>Assessment and Response Actions</b>			
Describe types of periodic assessments performed (internal and external) <i>Examples may include:</i> <ul style="list-style-type: none"> <li>• <i>Technical Systems Audits</i></li> <li>• <i>Instrument Performance Evaluations and Audits</i></li> <li>• <i>Data Quality Assessments</i></li> <li>• <i>Audits of Data Quality</i></li> <li>• <i>Data Certification</i></li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sections C, D and Attachment 8
Assessment frequency and schedule	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sections C, D and Attachment 8
Assessment personnel	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sections C, D and Attachment 8

Assessment reporting / documentation	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sections C, D and Attachment 8
Describe procedure used to guarantee independent and unbiased performance audits	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sections C, D and Attachment 8
Procedures for reporting the need for and for implementing corrective actions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sections C, D and Attachment 8
Identification of individual(s) responsible for determining the adequacy / success of corrective actions	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sections C, D and Attachment 8
Timeframes for reporting and resolving identified deficiencies	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sections C, D and Attachment 8
Emergency/contingency procedures for times when assessment(s) show data quality/quantity is in jeopardy (e.g., approaching inclement weather)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sections C, D and Attachment 8

### Reports to Management, South Coast AQMD, and the Public

Describe types of reports that will be developed. <b>(For internal and external distribution)</b> <i>Examples:</i> <ul style="list-style-type: none"> <li>• Quarterly data summary reports</li> <li>• Field technician reports</li> <li>• Internal systems audit reports</li> <li>• Corrective Action Reports</li> <li>• Other reports generated at routine intervals and routed through staff and management</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section C
Frequency, content and distribution of reports	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section C
Personnel responsible for developing these reports	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section C
Intended recipient(s) of each report	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section C

### Data Validation and Usability

Describe the procedures used to determine whether data are usable for their intended purpose. Should include some discussion of the following and other similar technical aspects of the monitoring program: <ul style="list-style-type: none"> <li>• Sample design (including methods used)</li> <li>• Data Collection Procedures</li> <li>• Monitoring Procedures</li> <li>• Quality Control</li> <li>• Calibrations</li> <li>• Data Reduction and Processing</li> </ul>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.7, D, and Attachment 8
Specific criteria for which, when exceeded, the data are immediately invalidated	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.7, D, and Attachment 8
Follow up procedures and timeframe to distinguish between data that may indicate an instrument issue and data that may reveal a real exceedance of established threshold limits	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.7, D, and Attachment 8
Protocols for specific situations that result in unusable data	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section A.7, D, and Attachment 8
<b>Validation and Verification Methods</b>			
Assure a data review process that provides adequate independence in validation procedures	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section D and Attachment 8
Procedures for verifying and validating data, including individual(s) responsible for this task	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section D and Attachment 8
Develop and include a data validation SOP (referenced in the QAPP and attached)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Attachment 8
Frequency of data verification and validation activities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section D and Attachment 8
Tools utilized in the verification / validation process	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section D and Attachment 8

Listing of applicable QA qualifier flags and their definitions (including examples of when to apply them)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section D and Attachment 8
Documentation requirements for each step of the data review process	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section D and Attachment 8
<b>Reconciliation with Data Quality Objectives</b>			
The process used to determine if the DQOs have been attained, frequency of this assessment, and individuals responsible	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section D and Attachment 8
Discussion of how results will be communicated to decision makers and the community	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section D.3
Discussion of how results will be documented	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section D.3
Discussion of potential corrective actions resulting from this process	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section D and Attachment 8
Discussion of how data anomalies are resolved	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Section D and Attachment 8