Attachment

PRIMARY QUALITY ASSURANCE ORGANIZATION
ROLES AND RESPONSIBILITIES

Five common factors have been identified by U.S. EPA that should be considered in defining a Primary Quality Assurance Organization (PQAO). Under the Air Resources Board (ARB) PQAO, ARB and Monitoring Organizations (MOs) shall strive to collaboratively address the following common factors to the extent practical. ARB has defined the roles and responsibilities of ARB and MOs within the ARB PQAO in regard to operation of the PQAO ambient air monitoring network in order to ensure the generation of high quality, legally defensible data.

1. Operation by a common team of field operators according to a common set of procedures.

ARB recognizes the unique air monitoring challenges that face California and that field operations by a common team may not be feasible. ARB and MOs acknowledge the need to strive for uniformity of procedures, thus both parties agree to work together toward employing consistent and reliable field operations.

ARB Responsibilities:

- Maintain and disseminate a Quality Management Plan (QMP). ARB shall regularly request input from MOs within the ARB PQAO and agrees to review and update the QMP as needed. ARB will communicate updates to MOs accordingly;
- Review and approve alternative QMPs prepared by MOs seeking ARB and EPA approval;
- Maintain a PQAO contact list and working webpage to disseminate information;
- Serve as a liaison between MOs within ARB's PQAO;
- Provide adequate training on key air monitoring fundamentals related to operations, maintenance, quality assurance/quality control, and data management procedures ;
- Facilitate Ambient Monitoring Technical Advisory Committee (AMTAC) meetings and information updates. Topics may include field, laboratory, quality assurance, and data management related items; and
- Participate in CAPCOA Monitoring Committee meetings and other informational forums.

MO Responsibilities:

- Adopt and implement ARB's QMP or an ARB and/or EPA approved alternative;
- Provide a supervisory level PQAO Point-of-Contact to ARB. The PQAO contact will be added to a list serve to allow for effective and timely dissemination of information;
- Participate in ARB and EPA sponsored ambient air monitoring training;
- Participate in AMTAC meetings and review information updates; and

- Participate in CAPCOA Monitoring Committee meetings and other informational forums.

2 Use of a common Quality Assurance Project Plan (QAPP) and Standard Operating Procedures (SOP) for state and federally mandated air monitoring projects.

ARB Responsibilities:

- Maintain and disseminate an ARB and/or EPA QAPP for state and federally mandated air monitoring projects or programs;
- Maintain and disseminate SOPs for monitoring and analysis. These SOPs may also include forms (i.e., check sheets, calibration forms, maintenance forms, etc.);
- Provide notification of updates/revisions, as they occur, to ARB QAPPs and SOPs via the PQAO point-of-contact list; and
- Review and approve alternative QAPPs and SOPs prepared by MOs.

MO Responsibilities:

- Adopt ARB QAPP, or an ARB and/or EPA approved alternative;
- Adopt ARB SOPs, or ARB and/or EPA approved alternatives;
- Review/update SOPs on an established schedule and notify ARB of any revisions made as they occur; and
- Agree to make available to ARB a record of quality assurance related documents (QMP, QAPP, SOP, training plan, etc.) being utilized by the MO's ambient air monitoring network.

If a District conducts a special purpose monitoring program funded by EPA, the MO shall seek quality assurance assistance from the EPA or ARB Quality Management Branch.

3. Common calibration facilities and standards.

MOs within the ARB PQAO are encouraged to utilize the services provided by ARB's Standards Laboratory for certifications, calibrations, and verifications. Organizations choosing to utilize external calibration facilities or vendor produced standard materials, must provide documentation of traceability upon request by ARB or EPA.

ARB Responsibilities:

- Provide timely certification, calibration, and verification services that meet or exceed 40 CFR Part 58 requirements via the ARB Standards Laboratory upon request.

MO Responsibilities:

- Utilize ARB certification, calibration, and verification services, or provide the name of the facility being used and the record of traceability to NIST.

Additionally, ARB may provide equipment acceptance testing, repair, and field calibration services to MOs upon prior or mutual agreement, which may depend upon budget feasibility and staff availability.

4 Oversight by a common quality assurance organization.

ARB Responsibilities:

- Identify pollutant-specific parameters that are included in the ARB PQAO;
- Conduct Performance Evaluation (PE) audits of MO monitoring sites as required in 40 CFR Part 58, Appendix A, including Section 3.2.2 (PE audits for SO2, NO2, O3, and CO), and Section 3.2.4 (semiannual flow rate audit for Particulate Matter (PM samplers), as well as, meteorological audits, and lead sampler audits, as appropriate;
- Conduct annual siting evaluations at each air monitoring station to determine compliance with 40 CFR Part 58, Appendix E, and consistency with current Air Quality System (AQS) parameters;
- If an instrument or analyzer is found to be outside acceptable limits, ARB shall initiate Air Quality Data Action (AQDA) requests. The AQDA will request the MO to correct the identified deficiencies and ensure associated ambient air data are verified to be good quality data. To ensure compliance, ARB shall conduct a re-audit to verify the corrective action once the problem has been resolved;
- Conduct technical systems audits (TSA) of all MOs within the ARB PQAO on an estimated schedule of every 3-5 years;
- ARB shall maintain a database, Corrective Action Notification (CAN), to be used by monitoring agencies to report operational problems, instrument malfunctions, and/or any items needing corrective action or investigation;
- Provide procedures and criteria for data acceptability and corrective action determination;

- Perform annual certification of data for which ARB has AQS submittal authority by May 1st of each year; and
- Perform an annual evaluation of the statistical summaries of quality assurance and quality control data from all MOs in the ARB PQAO.

MO Responsibilities:

- Review and verify pollutant-specific parameters on an annual basis that are included in the ARB PQAO;
- Participate in criteria pollutant, particulate and meteorological PE audits;
- Participate in laboratory PE audits. For laboratory programs not supported by ARB, the MO agrees to participate in a EPA or ARB approved alternative audit program, if available;
- Participate in EPA required technical system audits conducted either by ARB or EPA;
- Review and verify data quality against ARB or EPA established acceptance criteria prior to submittal to AQS;
- Review MO data in AQS on a quarterly basis to verify accuracy and completeness (AMP 255 and 430 reports); and
- Utilize ARB's CAN process to report instrument malfunctions, operational problems, and/or any items needing corrective action or investigation.

In addition, the MO is responsible to:

- Resolve AQDAs, CANs and TSA findings, or develop corrective action plan as appropriate, within 45 days of issuance;
- Utilize the CAN process to notify ARB's Quality Management Branch of issues regarding data quality as well as impending data actions in EPA's Air Quality System (AQS) within 45 days of determination of issue;
- Validate air monitoring data prior to submission to ARB for upload to AQS; and communicate to ARB when data have been altered or modified after it has been submitted (Note- Districts performing their own data validation and upload to AQS shall communicate directly with ARB after the data has been modified in AQS) ;
- Districts uploading data directly to AQS shall validate data before upload to AQS; and certify their data annually by May 1st of each year; and
- Upload air quality data in accordance with EPA requirements.

5. <u>Support by a common management, laboratory or headquarters.</u>

Operating California's complex ambient air monitoring network requires ARB to work collaboratively with each MO. In order to accurately assess the MO's monitoring

network, both parties must document and evaluate potential or scheduled modifications to the air monitoring network.

ARB Responsibilities:

- Provide and review an annual survey questionnaire regarding MOs monitoring network planned changes (i.e., new/removed instruments, site closures, new sites, contracted services, etc.) for MOs in ARBs PQAO that are not drafting their own annual network plans as required by 40 CFR 58.10. ARB shall review completed questionnaires within 30 days of receipt and provide feedback as necessary to MOs regarding network changes;
- Participate in annual meeting/teleconference during the network review period to discuss ARB PQAO monitoring network status; and
- Provide laboratory analytical support as required (i.e., PM2.5 and PM10 mass analysis, Toxics analysis, speciation, etc.) upon prior or mutual agreement.

MO Responsibilities:

- Complete the annual questionnaire regarding MO monitoring network changes within 30 day of receipt from ARB (if applicable);
- Communicate all site changes (i.e., openings, closures, relocations), not mentioned in the annual questionnaire to ARB, in a timely manner;
- Participate in ARB PQAO monitoring network status meetings/teleconferences; and
- Provide timely sample return and proper documentation of field sample collection activities (i.e., chain-of-custody, sample collection dates and times, etc.).

MOs submitting annual Network Monitoring Plans directly to EPA shall continue to submit plans directly with a copy provided to ARB's PTSD to utilize during the statewide network assessment.

If circumstances should arise that prevent either the ARB and/or MO from meeting the above mentioned responsibilities, the agencies shall work collaboratively to ensure that the tasks are completed to meet the common goal of generating legally and scientifically defensible data throughout the PQAO monitoring network. As needed, both agencies will work with EPA Region IX to assist in meeting the PQAO requirements.