WESTAR
Western States Air Resources Council

June 6, 2025

Vaughn Noga, Chief Information Officer
U.S. Environmental Protection Agency
Office of Mission Support
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: EPA's Quality Assurance Project Plan and Quality Management Plan Standard Directives

Dear Mr. Noga,

The Western States Air Resource Council (WESTAR), a regional, non-partisan, non-profit association of state air quality agencies in the western United States, submits on behalf of our members, comments regarding the U.S. Environmental Protection Agency's (EPA's) Directive Nos: CIO 2105-S-01.0 – Quality Management Plan (QMP) Standard and CIO 2105-S-02.1 - Quality Assurance Project Plan (QAPP) Standard (Directives). These Directive, signed in January 2023 (QMP) and April 2024 (QAPP), were issued without an opportunity for air agencies to provide input. States have highlighted numerous quality assurance workload challenges, and we are sharing these concerns, along with suggestions to improve feasibility for states, with EPA.

EPA's Directives establish requirements for implementing EPA's Quality Program to ensure environmental information operations meet documented quality standards. The Directives require all EPA and non-EPA organizations conducting environmental information operations on behalf of EPA to comply with an Agency-wide Quality Program. It ensures all projects are executed under an approved QAPP and the organization's overall QMP, which must be reviewed and approved by EPA Quality Assurance Managers (QAMs) before any project work begins, except in emergencies requiring immediate action.

State, local, and Tribal air agencies face difficulties complying with these Directives for several reasons. The expansion of QAPP and QMP requirements, including detailed Quality Assurance (QA) and Quality Control (QC) requirements that must be documented and implemented for programs that historically have not had a QAPP with associated QMP, creates a strain on resources (see Table 1 and Table 2 for examples). In addition, many grants that state, local, Tribal, and community organizations are applying for now require a QAPP and QMP to be approved before awarded grant funds can be used, and for new grants, included in the grant application submission. The QAPP and associated QMP must also be reviewed annually for any changes that would require re-approval by EPA. The QAPP and QMP are valid for no more than 5 years. These requirements can cause issues; first, many agencies and community organizations applying for these grants lack experience in drafting QAPPs and QMPs, and second, for some agencies, creating a QAPP before a project begins can be premature and less effective overall. These states have expressed that in their planning, QAPPs are most beneficial when developed after the project is underway, ensuring that quality assurance goals align with the tested and established methodologies. This is not the case for all states, however. At least one state has said that, from a QA perspective, drafting a QAPP before a project begins creates a clear purpose and alignment of data quality

objectives with project goals, helps with managing the project scope, and provides a framework for implementation. This letter outlines the main issues air agencies face with these new Directives.

The Expansion of QAPP and QMP Requirements in the New Directives

The Directives state that "QAPPs" and associated "QMP" are required for all work performed by or on behalf of EPA involving the collection, production, evaluation, or use of environmental information and the design, construction, operation, or application of environmental technology." Furthermore, the Directive defines environmental information operations as "…a collective term that encompasses the collection, production, evaluation, or use of environmental information by or for EPA and the design, construction, operation, or application of environmental technology." Based on this definition, air quality activities requiring a program-level QMP, and project-specific QAPPs, include ambient air monitoring, data analysis, air quality modeling, and emissions inventory. While all agencies have QAPPs and the associated QMP for ambient air monitoring, many do not have QAPPs and overall QMP details for other programs such as data analysis, modeling, or emissions inventory. For emissions inventory (EI) programs, agencies have EI QA/QC procedures and varying levels of documentation in place. This proposed expansion is a significant new burden and was not presented to and discussed with state, local, and Tribal EI programs before any action was taken. The requirements in the Directive have not been discussed during EPA's Emissions Inventory and Analysis group meetings with states or mentioned in EPA's monthly National Emissions Inventory (NEI) newsletter. As a result, air agency EI program contacts are unaware of this requirement, and it seems that even the EI group within EPA's Office of Air Quality Planning and Standards has not been informed. This lack of communication within the EPA is concerning.

Whether QAPPs and associated QMP are needed for certain activities, such as smoke forecasting or air quality modeling, is debatable. However, many states do not have the resources in their Quality Assurance programs to create additional QAPPs and updates to their QMPs for these programs. Addressing this would require new resources to meet the requirements outlined in the QA Directives.

EPA's expansion of QA requirements necessitates a commensurate investment in ongoing resources to assist agencies. This need includes developing QAPPs and associated QMP for traditional air quality programs as well as addressing the growing number of grant-funded initiatives that now require project-specific QAPPs, such as those required for American Rescue Plan (ARP) funding under the Enhanced Air Quality Monitoring for Communities grant program, or more recently, QAPPs required for Climate Pollution Reduction Grant (CPRG) applications and planning. Using the CPRG application process as an example, agencies encountered difficulties drafting the requisite QAPP because the individuals working on these grants often came from energy, climate, or other non-air programs. These individuals typically lack experience with the QA processes, leading to a disconnect in understanding what a QAPP involves. Additionally, requiring detailed QA documentation during the planning phase – before the project is fully defined – is incongruent and ineffective. Regarding the CPRG process, the extensive effort required to document the project QAPP was unmanageable within the tight grant submission timeline, and, at times, it felt like a mere paperwork exercise to complete the application.

Reevaluate QAPP Applicability:

Ambient air monitoring data is used as the basis for comparison to the National Ambient Air Quality Standards (NAAQS), as outlined in 40 CFR Part 50 (NAAQS), 40 CFR Part 51 and 52 (Implementation

Plans), and 40 CFR Part 58 (Ambient Air Quality Surveillance). Because ambient air monitoring data serves as the underpinning for air quality management programs, its accuracy is critical, and a QAPP requirement is appropriate. Failure to adhere to strict quality standards could result in erroneous data, leading to incorrect designations, inaccurate assessments, and poor decision-making. On the other hand, low-cost air sensors are not included in rule and are not used for determining compliance with the NAAQS. Low-cost sensor projects serve a different purpose - to expand monitoring coverage, support the timely delivery of air quality information to the public, and increase public engagement. With the increasing funding availability and the growing recognition of low-cost sensors as a valuable tool, grant programs are likely to expand further. Having a QA framework within these projects to address low-cost sensors is reasonable; however, requiring a comprehensive QAPP for these sensors is excessive and complicates EPA's auditing of the monitoring program. Ambient monitoring QAPPs are extensive, robust, and supported in rule because they produce data of the highest quality that will be used for NAAQS comparison. Air agencies and community organizations that install PurpleAir sensors for informational purposes do not need a QAPP that goes that deep. Instead, a QAPP for sensors may focus on A to B channel comparisons or siting guidelines – items that are much simpler to document. Requiring a burdensome QAPP for these grant projects serves as a deterrent for agencies and community groups, with some even opting not to apply for grants due to the overwhelming QAPP requirements.

Appendix W of 40 CFR Part 51, which provides technical guidance and procedures for applying air quality models to assess compliance with the NAAQS, does not contain specific requirements for QAPPs for modeling projects. Air agencies rely on Appendix W and modeling protocols to guide the use of modeling data, and again, a comprehensive QAPP for this program seems unnecessary.

In terms of project-specific QAPPs, requiring a quality assurance project plan, with emphasis on the *project*, is appropriate and can be beneficial. A well-developed QAPP would help organizations plan their process upfront, leading them to execute the work plan more effectively later. However, the new QA Directive and QAPP guidance take the requirement too far for most grant-funded projects.

The western state, local, and Tribal air agencies urge EPA to reexamine the QA Directive and work with EPA regions and the air agencies in the West to align QA requirements more effectively. It should be noted that these new requirements add to the already extensive QA obligations states, locals, and Tribal air agencies fulfill under Performance Partnership Agreements (PPA) and Performance Partnership Grants (PPG). We all recognize the importance of QA, particularly with the rise of new technologies and the growing volume of data submitted to EPA. However, agencies should not be burdened with excessive QA requirements that ultimately lead to inefficiencies, wasting the agency's time and that of EPA reviewers. We appreciate the opportunity to provide our input and perspective. If you have questions or need further information, please contact WESTAR's Executive Director, Mary Uhl (maryuhl@westar.org).

Sincerely,

Bo Wilkins
Western States Air Resources Council President

TABLE 1

Program Activity	Has program-level QAPP?
1. Ambient air monitoring	**Yes**
o direct measurements of environmental parameters or processes.	
o analytical testing results of environmental conditions (e.g., geophysical or hydrological conditions).	
o information on physical parameters or processes collected using environmental technologies.	
2. Data analysis	**No**
o calculations or analyses of environmental information.	
o information compiled or obtained from databases, software applications, decision support tools, websites, existing literature, and other sources.	
3. Modeling	**No**
o information provided by models.	
o information compiled or obtained from databases, software applications, decision support tools, websites, existing literature, and other sources.	
o development of environmental software, tools, models, methods, applications;	
4. Emissions Inventory	**No**
o calculations or analyses of environmental information.	
o information compiled or obtained from databases, software applications, decision support tools, websites, existing literature, and other sources.	
5. Grants	**No**
o Information/data compiled to include in reports and evaluation	
o administration of grant programs for funding air quality projects or research	
o assessing and documenting eligibility, priorities, and outcomes for funded projects	
o monitoring and reporting of grant performance	

TABLE 2

Summary of impacts (Example from Washington Ecology):
The Air Quality Program has a robust Quality Assurance group within the Technical Services Section. The current QA team consists of 4 FTE (QA Coordinator and 3 QA Specialists). This team is fully occupied with maintaining the quality system for the Washington State Ambient Air Monitoring Network.

The QA team maintains the following QAPPs for air monitoring:

Quality Assurance Plan (Program Level)	1
Project Specific QAPPs	4
Small study QAPPs	1

Assuming a similar amount of QAPP work in the Data Analysis, Modeling, and Emissions Inventory program activities, a conservative estimate of workload would be 0.6 FTE for each program activity for writing and reviewing QAPPs and another 0.4 FTE for each activity for review, verification, and validation of environmental information operations assessment of adherence to QAPPs.
This translates into 1 FTE per program activity, at a bare minimum.

Summary of impacts (Example from Oregon DEQ):
The Air Quality Program does not have a Quality Assurance group. The Laboratory Environmental Assessment Division (LEAD) does have a Quality Assurance group has 2 FTE, and there is an agency QA officer. The current QA team consists of a lab operations QA Officer and a field operations QA officer. The single field operations QA officer is responsible for field QA oversight and audits, and QAPP and SOP review of the entire air and water monitoring programs for the entire state, including all QA audits and all QAPPs for both programs. The lab operations QA officer is responsible for lab QA oversight of all analytical activities carried out by LEAD.

The QA team reviews and maintains the following QAPPs for air monitoring:

- Criteria pollutants (includes all 6 pollutants, governs monitoring for EPA and state programs)
- Air Toxics (includes 107 analytes, governs monitoring at two EPA NATTS sites and 8 state air toxics monitoring sites run the same way)
- Photochemical Assessment Monitoring Stations (PAMS) for EPA PAMS program
- Meteorology (in progress)
- PM2.5 Chemical speciation QAPP

In place of location or project-specific QAPPs, the QA team reviews and maintains Sampling and Analysis Plans (SAPs) for specific monitoring locations for:

- Each Air Toxics monitoring site (9 in total)
- Any shorter-term duration special studies or monitoring projects (typically 1-2 per year).

DEQ's existing QA staff are oversaturated with activities and cannot add more. As it is, field audits by QA staff are essentially restricted just to federal monitoring programs and state air toxics sites, roughly 27 of the 72 air monitoring sites run by DEQ.

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This translates into 1 FTE per program, at a bare minimum.

Summary of impacts (Example from Hawaii DOH/CAB)
The Air Quality Program has one QA Officer to provide support for all QA activities for the entire branch, including preparing QAPPs and providing updates as necessary to implement QA/QC requirements.

The QA staff has historically had responsibility for reviewing and maintaining:

1. The QMP
   The initial QMP for our Air Monitoring Program was a division QMP that covered multiple branches (e.g., air, water, etc.). A separate QMP for the Air Monitoring Program is now required to document quality standards in greater detail. Work is in progress to finalize the QMP.
2. The Air Monitoring Program (regulatory network) QAPP
   The QAPP was approved by EPA on September 27, 2023.

In response to recent EPA requirements, additional QAPPs and QMP revisions are new requirements in our federal grants. In addition to the historical QA work above, CAB's additional QA work now includes:

1. Emissions Inventory (EI) QAPP for Greenhouse Gas (GHG) Inventory Work Under the CPRG
   EPA approved the QAPP with QMP elements in December 2023. The QAAP was for Hawaii's Priority Climate Action Plan (PCAP). An EPA optional template was used to write the QAPP.
2. EI QAPP for GHG Inventory work for IRA and CAA105 Grants
   A QAPP was developed and submitted for EPA approval on May 29, 2025.
3. Non-Regulatory Special Purpose Air Monitoring QAPP for IRA Grant
   Work is in progress to prepare a QAPP for non-regulatory air monitoring.
4. QMP for Monitoring Program and EI Grants
   Work is in progress to prepare a QMP for monitoring and emissions inventory work.

As the QA Officer is already overloaded with previously existing QA responsibilities, other sections in the branch have been providing assistance to the QA Officer to try and address the new QA requirements, including work on the EI QAPP and incorporating QA procedures for EI work with the Monitoring Program QMP. This is not a viable long-term solution as the other sections are already fully occupied with their own responsibilities and cannot permanently take on additional tasks.

Addressing other new QA requirements not mentioned above, such as those for data analysis and modeling will require even more resources to develop additional QAPPs and further revise the QMP. At least one other full-time QA specialist is needed to assist with this work.