WESTAR
Western States Air Resources Council

May 13, 2021

Peter Tsirigotis, Director
Office of Air Quality Planning and Standards
U.S. Environmental Protection Agency
Mail drop: C404-04
109 T.W. Alexander Drive
RTP, NC 27711

Dear Mr. Tsirigotis:

WESTAR is writing this letter of support for the GAO-21-38 report. WESTAR strongly supports the conclusions found in this report, and thanks the GAO and Senators Carper, Whitehouse, and Collins for recommending that the study be conducted. It is long overdue.

That report, to which WESTAR contributed data, concludes with two recommendations, briefly summarized as:

- EPA OAR should develop an asset management framework for sustaining the National Ambient Air Quality Network that include key characteristics such as identifying the resources needed to sustain the monitoring system, using quality data to manage infrastructure risks, and targeting resources toward assets that provide the greatest value.
- EPA OAR should develop and make public an air quality monitoring modernization plan to better meet the additional information needs of air quality managers, researchers, and the public.

In both of its key recommendations, GAO emphasizes the importance of EPA consulting closely on these plans with state, local, and tribal partners. Subsequently, in EPA's response to the GAO's report, they commit to working with state, local, and tribal partners to implement the recommendations. WESTAR is eager to engage in discussions with EPA on these efforts and look forward to written implementation plans then coming from EPA. Specifically, WESTAR has identified several areas within GAO's recommendations where we hope that EPA will engage with states on implementation. Those areas include:

Funding

State, tribal, and local air regulatory agencies responsible for sustaining air monitoring networks need additional funding to keep pace with inflation and operating costs, fund Air Toxics and other specialized networks (i.e. PAMS, IMPROVE, CSN, CASTNET, NADP), and adequately fund all operating networks. These networks determine and inform pollution reduction strategies for NAAQS compliance, nonattainment, and maintenance. All monitoring networks also support and inform regulatory responses to short- and longer-term health exposure problems through other Clean Air Act programs, as well as track progress on long-term health and welfare goals.

Resources are needed to lessen the impacts of state, tribal, and local agencies having to choose between monitoring programs' operations. Some of the specific funding issues that states face are as follows:

- IT equipment upgrades are necessary. Information Technology needs change over time and equipment becomes outdated and needs to be upgraded.
- Database updates (including AQS modernization) are necessary. EPA's outdated databases do not meet modern public demands for real-time, flexible data access.
- Air Toxics monitors are not adequately funded. States are often left to fund Air Toxics works from state funds even in areas where public demands are high for such data.
- Sensor networks are needed. Many states face public pressure to deploy modern air quality sensors. Without EPA funding, States are only able to deploy sensors when funding permits rather than according to need.
- Shelter and hardware expenses are not adequately funded. Outdated equipment and shelters need funding to be modernized.
- Excessive staff time is needed to meet outdated requirements (e.g., AQS). Antiquated databases drain staff time that could be better used elsewhere.
- Air agencies face a dilemma of using staff time and funds to update old monitoring equipment vs replacing it. In many cases, States are left to acquire spare parts on eBay because equipment has been discontinued and replacement is not funded.
- Funding for monitors in rapid population growth areas is needed. States have often had to fend for themselves in areas of rapid population growth.

Non-State Networks

Several specialized air monitoring networks are used by states but are not operated or maintained by those states. For example, the Regional Haze Rule requires states to use data in periodic Clean Air Act-required implementation plans from the IMPROVE monitoring network for emissions control planning and progress tracking at the Nation's Class I areas. Over 75% of the visibility-protected Class I areas are in the 15-state WESTAR region; data from these sites also provide estimates of background air quality outside and/or upwind of population centers. States must rely on this data but have very limited access to verify proper sampling procedures. 24-hour average data for each sample day must be successfully and simultaneously captured from multi-channel filter samplers that require substantial time and cost to 1) properly operate, 2) collect and ship samples, and 3) then rely on the samples being correctly processed at a single lab location for the whole U.S. under a federal contract. The samples are collected every 3rd day and the filter packs are changed weekly by federal operators and contractors. IMPROVE does not operate any continuous monitoring as part of the regulatory tracking required in RHR. While states are required to use these data, they have very limited access to verify that proper quality assurance and quality control protocols are followed. Wildfires and other uncontrollable operational problems at these remote locations cause data losses for which the states are then required to conduct additional analyses to substitute or supplement for air quality planning. Additionally, week-to-week operations and the subsequent data reporting is not done with direct access or oversight by states. The systems used for the IMPROVE network are highly manual requiring weekly site visits to rural remote sites near or in national parks and wilderness areas, where the visitor experience with visibility and air quality is significantly impacted by effects of climate change on wildfires, drought and windblown dust, as well as the transport of international emissions.

Because IMPROVE network operations are paid for with CAA §105 State and Tribal Air Grant funds which are allocated "off the top" by EPA, states, tribes, and local air agencies are, in effect, paying for this network. Flat funding for IMPROVE over the years has translated to higher program costs that are no longer covered by federal funding, affecting maintenance as well as preventing sampling method replacement plans or needed updates to technology, since the early 2000s.

Increased Flexibility

WESTAR states value flexibility in how they manage their monitoring networks. While it is understandable that certain monitoring requirements are necessary, such as placing monitors in urban areas, there are times when states need allowances for shifting resources. For example, some states continue to operate and maintain Carbon Monoxide (CO) monitors for areas that are now in attainment for CO and, because of significantly reduced emissions, are unlikely to exceed the current standard in the foreseeable future. Allowing states to eliminate these monitors would free up resources for other important monitoring. Similarly, as populations grow, outdated minimum monitoring requirements require states to establish new monitoring sites for pollutants such as PM_{10}, which provide little utility in most populated areas with existing, representative PM_{10} monitors. These minimum monitoring requirements should be reconsidered in light of current population trends and prioritization of monitoring needs. WESTAR recommends that EPA allow flexibility through the use of monitoring waivers to optimize the resources needed to operate their networks as well as opening a dialog with states on how EPA and states can effectively prioritize the use of financial resources assigned to regulatory networks.

Updated training

As monitoring improves it becomes more complex and increasingly integrated with the internet and computer technology. Many states need additional resources, including staff training, to keep up with the evolving technology. States need updated EPA training for staff on how to maintain modern databases, set up and deploy highly technical data driven monitoring networks and maintain data security. There is no training available that WESTAR is aware of for how to set up and configure a cellular modem, for example, and States are left to figure out how to do this on their own, resulting in highly variable outcomes. States would appreciate being allowed more flexibility to use CAA §103 funds for training related to quality assurance, network operation, air toxics and small sensors.

Updated Guidance and Policies on the use of different monitoring methods

WESTAR Recommends that EPA engage with WESTAR regarding modern discussions of monitoring networks including:

- The use of FRM vs. FEM monitors. Several WESTAR states have expressed reluctance to use some FEMs because of biases when compared with FRMs. In some cases, FEMs biases would result in non-attainment designations where FRMs show attainment. The conditions in which candidate FEMs are evaluated are often not representative of air quality conditions in WESTAR States. WESTAR recommends updated, clear guidance on appropriate uses of FRMs vs. FEMs that reflect the unique challenges of monitoring in western states, especially in areas of critical concern.
- Low Cost Sensors. Clear and uniform national guidance for appropriate uses and methods for sensor networks.

- Air Toxics. Clear guidance for appropriate uses and methods for supplemental Air Toxics and Sensor Networks.
- Federal funding for air toxics and sensor networks should be increased. How can states that rely mostly on CAA §103 funding get funding for Air Toxics and Low-Cost Sensor networks?

Other Needs for Updated Resources and Guidance

Databases should be modernized and meet the needs of the public, states, and EPA. There is a need for uniform monitoring expectations among Regional Offices, especially where cross-state agreements span EPA regions. The CFR and Redbook Template Guidance should be updated to eliminate inconsistencies.

WESTAR concurs with many of the findings contained in the GAO report and would like to work with EPA towards implementation of the findings. Because EPA committed to working with state, local, and tribal partners to implement the recommendations, we look forward to collaborating with you. Please contact Jay Baker from the WESTAR staff at jbaker@westar.org or 435-757-9868 to schedule a time for you and/or your staff to meet with WESTAR. We look forward to continuing our collaboration with EPA to improve our nation's air quality monitoring networks.

Sincerely,

Marianne Rossio, President
Western States Air Resources Council