

Section 11. Regulatory Changes and Schedule

There are a number of federal regulations that are used to provide the framework for ambient air quality monitoring. These regulations cover the sampling and analytical methods used, how new methods are approved, quality assurance and control procedures, and basic monitoring objectives for certain air pollutants. A great deal more technical information is provided in guidance documents and through the Internet.

Guidance documents are relatively easy to modify as new procedures and technologies appear within the monitoring community. Federal regulations are not particularly easy to modify; however, periodic reviews and revisions are necessary in order to create an air monitoring system that is responsive to current environmental data needs. Along with a variety of topics, we intend to review and modify our regulations to incorporate more continuous particle techniques as part of a larger overall national monitoring strategy. We also intend to establish mechanisms for incorporating continuous techniques by using guidance documents whenever possible.

Specific Regulations to be Reviewed:

There are three main regulatory “Parts” of the Code of Federal Regulations (CFR) that we will investigate in our work to modify the monitoring regulations. These regulations are all part of CFR Title 40 which deals with the environment. Specifically:

40 CFR 50¹¹ Appendices: National Primary and Secondary Ambient Air Quality Standards (NAAQS), Appendix L. This regulation provides us with the NAAQS and the federal reference methods for measuring each air pollutant with an established standard. We are NOT going to modify the national ambient air quality standards with this regulatory review. Reviews and, if needed, revisions of the NAAQS occur in separate formal processes. We do want to review a portion of the minor requirements in the Appendix L portion of this regulation which describes the reference method for measuring PM_{2.5}. The overall reference method will not be modified; however, we do want to examine some of the requirements for reporting supplementary data on the samplers’ performance. We have successfully completed two annual quality assurance reports on the PM_{2.5} FRM network operation, and we believe that we can reduce the amount of supplementary data being reported to EPA, specifically in Table L-1. This is a small change; however, it may provide some relief to State, local, tribal, and other monitoring agencies’ data managers.

40 CFR 53 Ambient Air Monitoring Reference and Equivalent Methods. This regulation provides air quality monitoring instrument manufacturers with the application and testing requirements for reference and equivalent methods that must be followed in order to have their sampler/analyzer approved for regulatory use. The EPA’s Office of Research and Development (ORD) is currently responsible for these approvals. This regulation describes the

¹¹Regulations are cited in documents using the format “Title# CFR Part#”.

complexities of how new criteria pollutant methods can be formally introduced into the ambient air monitoring network. EPA is a strong proponent of this formal process given the policy and financial impact that decisions using data from federal reference and equivalent methods can carry. We will review this regulation; however, changes to it may or may not be taken in this package. The particulate matter National Ambient Air Quality Standard is being reviewed separately by the EPA. This separate process will also be used to promote continuous particulate matter monitoring technologies within our regulations.

The EPA's ORD has established a Reference and Equivalent Method Board that includes members from OAQPS and ORD. This Board's function has been to review new and modified proposals for fine particulate matter monitoring candidate methods, and to provide broader program input into the approval process. OAQPS proposes to expand the role for this Board to include identifying how to incorporate regional equivalency into the existing reference and equivalent method testing program prior to any actual regulatory change. This approach may need to take the form of a pilot project initially. We will also need to examine our regulatory authority for making such a change. There is a precedent for approving regionally based equivalency within the particulate matter program, specifically with the approval of the Oregon DEQ Med-Vol sampler. It will be necessary to follow-up with any regional equivalency process with formal regulatory changes to Part 53.

40 CFR 58 Ambient Air Quality Surveillance. This regulation is a primary focus of our efforts to both incorporate new technologies and to provide data as outlined in the national monitoring strategy. Nearly all data collection and reporting requirements, all the quality assurance requirements, the NAAQS pollutant network design criteria, the air quality index reporting, and annual data certification requirements are included within this regulation. This regulation describes how the Clean Air Act air monitoring authority has been interpreted and implemented by the EPA and our State and local agency partners for air pollutants with established NAAQS. Tribal agencies are not regulated under this provision; however, the technical requirements within should be familiar to any tribal agency that plans to conduct monitoring.

We expect to change the 40 CFR 58 regulations to allow more flexibility in designing the particulate matter monitoring network. One of these changes would include modifying the existing correlated acceptable continuous (CAC) particulate matter monitoring approach to allow for a more network-based approach rather than only the site-by-site approach as defined currently. The original CAC provisions were developed prior to the full deployment of sequential federal reference methods (FRMs) for fine particles as a way to provide sampling frequency relief from daily sampling. Since the sequential FRMs have been available and are working, the CAC provision has largely been ignored by air monitoring agencies. EPA will modify this provision so that it will provide a better mechanism for incorporating continuous particle monitors into the network.

Participants in the Regulatory Review

We have solicited input from a variety of parties for this regulatory review process. Through the larger air monitoring strategy, we have created a National Monitoring Strategy Committee that is providing advice and recommendations for the national air monitoring program. Some of these

recommendations will be realized only after regulatory change has taken place. The NMSC has been discussed in section 10 of this document.

We have also created three separate work groups, one each for the subjects of regulatory review, quality assurance, and technology. These work groups were established to make some concrete progress on the program changes needed to realize the national monitoring strategy goals. The quality assurance group will provide recommendations for changes to the quality assurance provisions of the monitoring regulations as well as all existing quality assurance practices; and the technology work group will make recommendations for use in the methods sections of the regulations and in technical guidance used by monitoring agencies. The regulatory review work group must take information from all of these parties, in addition to the NMSC and the work group's own recommendations, and develop an appropriate regulatory package.

The NMSC and the three work groups include representatives from the EPA OAQPS, the ten EPA Regional Offices, State agencies, local agencies, and tribal governments. All regulatory changes will undergo public review and comment inherent within the regulatory modification process. EPA will also work through existing mechanisms such as the STAPPA/ALAPCO Monitoring Committee and the Standing Air Monitoring Work Group (SAMWG) to communicate with stakeholders on these regulatory changes.

Schedule

Regulatory changes typically take a minimum of 18 to 24 months to complete, including the original proposal package preparation, publication and comment periods, reviewing and responding to comments, and finalizing a package for publication.

Cost estimates are generally prepared for a rule-making action such as the one. A complete funding review of air monitoring grant funds will also be needed, but this should be part of the overall monitoring strategy implementation, and not tied as directly to this package.

Key Milestones (later milestones are subject to change):

October - NMSC recommendations on the national network.

October 23-25 - Monitoring Strategy Workshop

December 1 - Draft rule-making language prepared for work group review.

January - External scientific review of monitoring strategy

June 2002 - Proposal in the Federal Register

July-September 2002 - Public comment period

October - December 2002 - Review public comments, prepare responses

January 2003 - Final regulatory package published in Federal Register