

**National Ambient Air Quality Standards for Particulate Matter, Proposed Rule
Docket No. EPA-HQ-OAR-2007-0492**

Comments from the Kentucky Division for Air Quality (Division)

General Comments

- The Division requests EPA issue PM_{2.5} implementation guidance concurrently with the final rulemaking.
- The Division requests EPA provide states with additional funding necessary to implement the revised PM_{2.5} standards, including additional ambient air monitoring equipment.
- The Division interprets EPA's request for comment on the NAAQS as purposefully seeking more information about how to implement the standard, rather than commenting on the revised standards. This approach is similar to the promulgation of the 1-hour standard for SO₂ and is problematic since there is limited implementation guidance or rulemaking to comment on prior to the finalization of the NAAQS.
- The Division maintains that EPA's existing regional haze regulations, which mandate continued visibility improvement through 2064 to natural background conditions at Class I areas, will also provide continued ancillary improvements in visibility for other areas, including urban areas. Therefore, the Division requests that EPA not establish the secondary PM_{2.5} standard for visibility given that the existing regional haze regulations already provide for requisite protection and long-term improvement of visibility. However, if EPA determines it should proceed to adopt a new secondary PM_{2.5} standard for PM-related visibility impairment, then the Division recommends that the standard should be implemented as applicable only to urban areas and not compete or conflict with existing regional haze requirements and that the standard be set at 30 deciviews (dv) given the inherent uncertainties of complying with a new visibility standard.
- The Division finds that use of data from sites designated as IMPROVE for comparison to a secondary PM_{2.5} visibility index standard could prove problematic as those sites are not always operated by state, local, or tribal air monitoring agencies. For example, Kentucky currently has two IMPROVE monitoring stations operated by the National Park Service in Edmonson County and in Trigg County. As the Primary Quality Assurance Organization (PQAO) for the State, the Division contends that agencies would need to work together to ensure data integrity, but a certain degree of responsibility should fall to the PQAO. The Division recommends that EPA outline certain responsibilities for data quality and certification in regulation.

Monitoring Comments

- Pursuant to Section VII.A.3. *Requirements for Data Use and Reporting Comparisons With the NAAQS for PM_{2.5}* (77 FR 39000), the Division concurs with the proposal to allow monitoring agencies to identify PM_{2.5} FEMs that are not providing data of sufficient comparability to collocated FRMs, and with EPA approval, to exclude these data in making comparisons to the NAAQS for PM_{2.5}. Under current regulations, a monitoring agency can identify a PM_{2.5}

continuous FEM as an SPM for a period of up to 24 months in order to resolve operational issues and access data quality and data comparability to a collocated FRM (77 FR 39011). Unfortunately, 24 months is sometimes not a sufficient period of time to resolve all operational and data quality issues with new monitoring technologies. As a result, the current rule dissuades air monitoring agencies from operating new monitoring technologies, such as continuous PM_{2.5} FEMs, at air monitoring sites after the 24-month period has elapsed. Under the proposed rule, each agency could continue to operate continuous PM_{2.5} FEMs longer than 24 months without comparison to the NAAQS as long as each agency specified their intention to use or not use data from these monitors for comparison to the NAAQS as part of their annual network plan. The EPA Regional Administrator would be responsible for approving recommendations. Once approved for exclusion from NAAQS comparisons, the data would still be suitable for comparison to the AQI (77 FR 39011).

- Pursuant to Section VIII. B.3.ii. *Use of PM_{2.5} Continuous FEMs at SLAMS* (77 FR 39012), while the Division understands that only a portion of continuous PM_{2.5} FEMs currently have an FRM collocated at the same site, the Division does not concur with the proposal to allow data comparability assessments between FEMs and FRM monitors that are not located at the same site. The proposal states that:

“it would be impractical to restrict the applicability of data comparability assessments to only those sites that had collocated FRM and FEM monitors. In these cases, the monitoring agency will be permitted to group the sites that are not collocated with an FRM with another similar site that is collocated with an FRM for purposes of recommending that the data are not eligible for use in comparison to the NAAQS” (77 FR 39012).

This proposal fails to consider spatial variability in concentrations even between sites that may seem similar or within close geographic proximity. Furthermore, use of the word “similar” in the proposal allows for a subjective evaluation of the appropriate sites for comparison. This proposal contradicts the current and proposed collocated siting requirements for the maximum allowable separation of collocated PM_{2.5} samplers and monitors. Currently, the allowable distance between collocated probes is between 1-4 meters, with a proposal to allow up to 10 meters with EPA approval (77 FR 39014). Instead, the Division recommends requiring that continuous FEMs be collocated with FRMs at the same site, and within allowable collocation separation distances, for performing data comparability tests.

- Pursuant to Section VIII. A.1. *PM_{2.5} and PM_{10-2.5} Federal Equivalent Methods* (77 FR 39006), the Division concurs with the proposed administrative amendment to 40 CFR Part 53.9 “Conditions of designation”, which outlines a number of conditions that must be met by a manufacturer in order to maintain designation of an instrument such as an FRM or FEM. The proposed amendment seeks to require that Class II and III PM_{2.5} and PM_{10-2.5} methods that receive FEM designations must continue to operate within the performance criteria specified in 40 CFR 58.35 for a period of one year following delivery to an air monitoring organization, providing that it is maintained and operated in accordance with the manual.

- EPA seeks to move towards a “weight of evidence” approach, in which the success or failure of any one check or series of checks would not necessarily preclude EPA from determining that data are of an acceptable quality to be used for regulatory decision-making. The Division agrees that a “weight of evidence” approach may be appropriate, provided that clear and standardized quality assurance procedures and guidance are developed and implemented nationally. The Division contends that the language of the proposal is vague and may in fact weaken the ability of air monitoring agencies to validate their own data and instead allows EPA to make decisions regarding data validity. (77 FR 39014, 39043)

The Division finds that monitoring agencies have intimate knowledge of their air monitoring networks and are best suited to validate the appropriateness of their own data for comparison to the NAAQS, based upon the data quality requirements established through rulemaking. EPA should ensure standardization of data validation practices nationally. If EPA is concerned that a particular air monitoring organization is not appropriately validating data or reporting data to AQS, then those specific issues should be addressed within EPA Technical Systems Audits.

- Pursuant to Section V. *Communication of Public Health Information* (77 FR 38963 – 38965), the Division concurs with revising the PM_{2.5} sub-index of the AQI to be consistent with revisions to the proposed annual standard. The Division finds that aligning the AQI to reflect changes in the NAAQS will ease communication and translation of health impacts to the general public. The Division supports the traditional approach of setting the AQI value of 50 to the same level of the revised annual standard, once promulgated. The Division also supports the approach of setting the AQI value of 100 to the level of the 24-hour standard, once promulgated. These revisions will provide consistency with sub-indices for other pollutants and allow for more effective communication with the general public.

Implementation/Modeling Comments

- Pursuant to Section IX.A. *Designation of Areas* (77 FR 39018), in discussion of EPA’s intention to issue various guidance documents at the time of the promulgation of the revised NAAQS or shortly thereafter for various implementation aspects, the Division does not support this approach. The Division finds that EPA has proven repeatedly to be significantly dilatory in issuing guidance regarding new standards. This has been identified as one of the most significant problems states face in several SIP improvement workgroups.

Lack of timely guidance regarding implementation of a revised standard seriously hampers states in their ability to begin development of SIP plans to address the new standards. In the past, EPA seems to have acknowledged this when reconsidering the 8-hour ozone standard because they stated that they planned on releasing the implementation guidance at the same time they published the final rule. Please note that EPA did not finalize a lower standard, but instead went with the original 2008 level, but has not yet provided guidance.

The Division recommends EPA to provide guidance in a timely manner, such as coinciding with the release of the final NAAQS, setting a codified deadline to release guidance, or going through notice-and-comment rulemaking over any issued guidance from EPA. In accordance with Kentucky Revised Statutes, the Division is prohibited from regulating by guidance.

Also, Section IX.B. *Section 110(a)(2) Infrastructure SIP Requirements* (77 FR 39018) that explains infrastructure submittals is confusing and is not clear in explaining exactly how a certification that has to go to public hearing is different from a typical SIP submittal. Further, the CAA recognizes that states need 3 years in which to develop the infrastructure SIPs; however, since EPA does not plan to provide guidance until 1 year after the effective date, the statutory timeframe is essentially reduced to 2 years.

- Pursuant to Section IX.C. *Implementing the Proposed Revised Primary Annual PM_{2.5} NAAQS in Nonattainment Areas* (77 FR 39020), the Division does not support the recommendation of using regional grid-based models, such as CMAQ and CAMx, in combination with source-oriented dispersion models, such as AERMOD, to develop PM_{2.5} attainment strategies for the revised annual primary NAAQS.
- Pursuant to Section IX.C. *Implementing the Proposed Revised Primary Annual PM_{2.5} NAAQS in Nonattainment Areas* (77 FR 39020), in discussion of establishing the Cross State Air Pollution Rule (76 FR 48208) and the Mercury and Air Toxics Standards rule (77 FR 9304), EPA suggests that these two rules will reduce emissions and contribute significantly towards attainment planning. These rules are the subject of ongoing litigation, and the Division is uncertain how these rules could be used in attainment demonstrations if the litigation is not resolved.
- Pursuant to Section IX.F.1.a. *Grandfathering Provision* (77 FR 39024), the Division agrees that EPA should revise 40 CFR 51.166 to provide a “grandfathering provision” applicable to SIP-approved PSD program. However, the Division recommends that the “trigger date” is not contingent upon public noticing a “preliminary determination”, but rather the grandfathering provision should be afforded to those projects with a complete application submitted prior to the effective date of the proposed amendment.
- Pursuant to Section IX.F.1.c. *Surrogacy Approach for the Proposed Secondary PM_{2.5} Visibility Index NAAQS* (77 FR 39026), the Division agrees with EPA’s proposal to use a surrogate approach for the purpose of making a demonstration under the PSD program. If the source makes a demonstration that a project will not cause or contribute to a violation of the mass-based 24-hour PM_{2.5} standard, the demonstration should also satisfy the requirement to demonstrate that the project will not cause or contribute to a violation of the proposed secondary visibility standard (77 FR 39025 - 39027). The Division also recommends that the surrogate approach for the secondary visibility standard be allowed to continue without sunset.