

# Southeastern State Air Pollution Control Agencies

*Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, West Virginia*

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June 29, 2012

Air and Radiation Docket  
Docket ID No. EPA-HQ-OAR-2010-1059  
U.S. EPA Mail Code: 6102T  
1200 Pennsylvania Avenue NW  
Washington, DC 20460

RE: Comments on 1-hour SO<sub>2</sub> NAAQS  
Implementation White Paper

Dear Docket Coordinator:

Thank you for the opportunity to comment on the Environmental Protection Agency (EPA) Office of Air and Radiation's draft white paper on implementation of the 2010 primary 1-hour sulfur dioxide (SO<sub>2</sub>) National Ambient Air Quality Standard (NAAQS). The implementation process is extremely important to the air pollution control agencies in the Southeast.

## Background.

On June 2, 2010, EPA promulgated a revised SO<sub>2</sub> primary standard which established a 1-hour standard of 75 parts per billion. In March and September 2011, EPA provided states with draft guidance on designations and implementation that prompted comments from many states. On April 12, 2012, EPA announced in letters to our state environmental commissioners that 1) EPA intended to move forward with the designation process for those areas with violating monitors, 2) EPA would initiate focused stakeholder forums to help EPA refine their approach to determining whether air quality in a given area is meeting the SO<sub>2</sub> NAAQS, and 3) EPA no longer expected the infrastructure SIP submittals to contain modeling demonstrations showing attainment of the standard in unclassifiable areas.

On May 22, 2012, EPA released a revised white paper to describe a revised approach for implementation of the primary 1-hour SO<sub>2</sub> standard. In particular, the white paper focused on the determination of whether the air quality in a given area currently meets the NAAQS. EPA sought stakeholder input through the aforementioned forums as well as directly to the docket to which this letter is addressed. Our comments and recommendations herein are designed to address key issues from the white paper as well as issues raised during the state, local, and tribal stakeholder forum held on May 31, 2012 in Durham, North Carolina. It is our desire to assist EPA in designing an effective and efficient approach to implementation of the 1-hour SO<sub>2</sub> standard including how to determine if areas are meeting the 1-hour SO<sub>2</sub> NAAQS.

Nonattainment Designations.

The undersigned support EPA's approach as noted in its April 12, 2012 letter to the state environmental commissioners to designate areas based on violating monitors. Nonattainment designations should always be based on quality-assured monitoring data. There must be ambient data demonstrating that SO<sub>2</sub> levels are above the standard before EPA initiates designation of any area as not attaining the standard. While modeling may be appropriate in evaluating permit applications, siting ambient monitors, and determining whether a monitoring waiver is appropriate (see related information herein), modeling should not be used as the basis for determining and designating the attainment status of an area. We strongly encourage EPA to clearly state in the SO<sub>2</sub> designations to be promulgated in the *Federal Register* that modeling should not be used to determine that air quality in a given area does not meet the NAAQS.

Preferred Approach for Unclassifiable Areas with Large SO<sub>2</sub> Emission Sources.

We offer the following suggested approach for determining whether an area is meeting the 1-hour SO<sub>2</sub> NAAQS:

1. SO<sub>2</sub> monitoring network requirements.

We recognize that existing SO<sub>2</sub> monitoring requirements were not designed with source specific locations as a primary siting criterion. If EPA decides that additional monitoring including source-oriented monitoring is needed, then the additional requirements should be established through the rulemaking process with an adequate opportunity for public comment. The implementation schedule should consider available resources. With that in mind, a structured phase-in schedule should be developed. The phase-in schedule for source-oriented monitoring should be prioritized based upon an actual emissions threshold.

EPA should establish a requirement for a first phase of monitor installations to be completed by January 1, 2015 and a second by January 1, 2017. The emissions thresholds used in this approach should be established through rulemaking, and should consider anticipated future SO<sub>2</sub> emissions after full implementation of major rules impacting these emissions such as the 2011 Cross- State Air Pollution Rule (CSAPR), the 2011 Mercury and Air Toxics Standards (MATS) Rule, and the reconsidered maximum achievable control technology (MACT) standards for industrial, commercial, and institutional boilers (the Boiler MACT) along with all associated installation and operating costs. Further, as implementing agencies prioritize the placement of monitors consistent with this emissions threshold approach, they should be allowed to consider other factors such as

population and source stack height. This approach would allow states to focus their resources in areas with the highest risk to public health and the largest sources of SO<sub>2</sub> emissions.

States should have flexibility to determine the location of source-oriented monitors as well as the appropriate number of monitors surrounding a given source. States should have the discretion to use modeling, wind rose information, and other tools to help with properly siting the monitors. Based on the results of initial phased-in data collection efforts, states should be given reasonable flexibility to relocate existing monitors to other sites.

Funding for an expanded SO<sub>2</sub> monitoring network was a significant issue discussed during the May 31, 2012 stakeholder forum. EPA should consider in its implementation planning the costs of purchase, installation, maintenance, and operation of all new monitoring equipment associated with revisions to the SO<sub>2</sub> NAAQS. Given the financial challenges of most state environmental agencies, EPA should, at a minimum, fund through Section 103 grants the installation costs for all additional SO<sub>2</sub> monitors required for the new standard.

Some states have noted in recent feedback to EPA that one approach could include requiring sources to install and operate monitors. As a group, we are neutral on the option of sources funding the monitoring although each agency reserves the right to file individual comments. If EPA chooses to advocate monitoring by the sources, states should be given full oversight to validate that monitoring is carried out according to acceptable practices through establishment of a Quality Assurance Project Plan (QAPP). Alternatively, EPA should provide a mechanism for funding to come to the states to support operation of the monitors as part of their own monitoring networks.

If a source-oriented monitoring requirement is established, EPA should also develop an exception to this requirement. Sources should be able to use modeling to avoid the monitoring requirement much like what was allowed in the lead source monitoring program. If a source models at less than a predetermined threshold percentage of the standard, a source-oriented monitor should not have to be installed. The CSAPR, MATS and Boiler MACT rules are expected to reduce SO<sub>2</sub> emissions from the largest sources. Projected actual emissions after subject sources have installed all required emission reduction strategies should be included in the exception analysis to determine if source-oriented monitoring is necessary.

2. Addressing future violations at source-oriented monitors.

EPA should allow a state to address a source-oriented ambient air quality violation using the air program permitting process if a violation is measured in an unclassified area after an ambient monitoring network is expanded. This may be the most efficient way to bring an area back into compliance with the NAAQS and is an appropriate federally-enforceable instrument to use. Given the short term nature of the SO<sub>2</sub> standard and the typical cause and effect relationship between an individual source of SO<sub>2</sub> and a violating monitor, the traditional designation process is not well-suited to efficiently address such violations. If a state does not address a violation in a timely manner, then EPA could proceed with designating an area as nonattainment and follow the SIP development process at that time.

3. Monitoring exit strategy.

EPA should establish a mechanism allowing monitors to be shut down as sources reduce their SO<sub>2</sub> emissions and the ambient concentrations decrease. Currently, for other criteria pollutants, EPA allows monitors to be shut down once the ambient concentrations are 85 percent of the standard. This is an appropriate level for discontinuing the operation of a source-oriented SO<sub>2</sub> monitor. This exit strategy for monitoring should be clearly defined in the monitoring rulemaking.

Preferred Approach for Unclassifiable Areas with No (or Insignificant) SO<sub>2</sub> Emission Sources.

EPA should simplify the approach for addressing unclassifiable areas that fall below a set threshold. During the May 31 stakeholder forum, EPA noted a threshold that would capture 90% of the national SO<sub>2</sub> emissions. If EPA were to require monitoring of ambient air quality around sources with actual emissions greater than or equal to a threshold, then counties having no sources at or above this threshold, and not being impacted by significant emissions from a source in an adjacent county, should be designated attainment or unclassifiable/attainment. Under this scenario, only those counties with sources whose emissions are above the SO<sub>2</sub> threshold should be designated unclassifiable and they should only be maintained in that classification until ambient monitoring determines the area is attaining or violating the SO<sub>2</sub> standard.

Section 110(a) Infrastructure SIP Requirements.

EPA has suggested a reasonable revised approach for the SO<sub>2</sub> infrastructure SIPs that are prescribed by June 2013. The criteria for such SIPs should be identical to the criteria for other criteria pollutant infrastructure SIPs. States should only be required to incorporate in the SO<sub>2</sub> SIPs the procedures that will be used to implement the new standard.

### Modeling.

The SO<sub>2</sub> implementation white paper discussed a hybrid approach for monitoring and modeling. We do not support using modeling to determine whether an area is meeting the NAAQS for designation purposes.

If EPA chooses to require or allow modeling as part of a hybrid approach, EPA should establish in rulemaking the criteria to be used to determine which sources must be modeled (e.g., a certain emissions threshold.) Further, EPA should allow a sufficient timeline for development of modeling protocols, conducting the modeling, establishing on-site meteorological monitoring, and collecting meteorological data if deemed necessary for production of reliable modeling results. Lastly, EPA should provide adequate funding for such efforts.

EPA should also allow the use of appropriate emissions rates. The use of a single maximum allowable emission rate for modeling compliance with short-term averages is unrealistic because it usually does not represent the distribution of hourly emissions on an annual basis. EPA should allow the use of actual emission rates and statistically representative emissions profiles when these data are deemed to be sufficiently reliable. This approach could include the use of continuous emission monitoring system data. EPA should allow sufficient time for states and the regulated community to collect onsite meteorological and ambient air measurements, and to evaluate model performance when necessary. The availability of onsite data is a key factor to ensuring credible model results.

### Conclusions.

We strongly believe that nonattainment designations should never be based on modeling. Modeling may be appropriate in the permitting process, determining the best location for siting a monitor, or determining whether a monitoring waiver is appropriate, but it should never be used to determine if an area is violating a NAAQS for designation purposes. We strongly encourage EPA to designate counties that are below a set threshold as attainment or unclassifiable/attainment.

The overall costs for implementing the short-term SO<sub>2</sub> standard are significant, regardless of which approach is ultimately followed. EPA should design an implementation strategy that will best use limited state resources to address real air quality issues. EPA should not set up an implementation strategy that mandates the investment of time and energy for investigation and analysis of theoretical problems produced by the model, or unnecessary paperwork that does not achieve real emissions reductions and real air quality improvements.

We appreciate the opportunity to provide comments and recommendations on the implementation of the 1-hour SO<sub>2</sub> standard. We reserve the right to supplement these comments with additional state-specific comments to the docket. We acknowledge the efforts EPA undertook to set up the stakeholder forums and the docket for receiving comments. We are very interested in being active, ongoing stakeholder participants throughout the implementation process. We stand ready to assist EPA with potential concepts prior to its proposing of a final implementation strategy.

If you should have any questions please contact any of the undersigned or John E. Hornback, Executive Director, Southeastern States Air Resource Managers, Inc. The latter may be reached at 404-361-4000 or hornback@metro4-sesarm.org.

Sincerely,



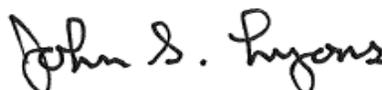
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