



North Carolina Department of Environment and Natural Resources

Pat McCrory  
Governor

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Secretary

July 14, 2014

Docket ID No. EPA-HQ-OAR-2013-0711  
U.S. Environmental Protection Agency  
1301 Constitution Ave. NW  
Washington, DC 20460  
Mail Code: 2822T

Dear Sirs:

The North Carolina Division of Air Quality (DAQ) appreciates the opportunity to provide comments on the U.S. Environmental Protection Agency's (EPA) May 13, 2014, proposed rule entitled, "Data Requirements Rule for the 1-hour Sulfur Dioxide (SO<sub>2</sub>) Primary National Ambient Air Quality Standard (NAAQS)."

The DAQ is supportive of the need to analyze and evaluate ambient air quality to ensure attainment and maintenance of the NAAQS. We appreciate EPA taking some of our previous concerns and viewpoints – with regard to implementing the 1-hour SO<sub>2</sub> NAAQS - into consideration in this proposed rule-making. However, the DAQ believes that several amendments to the details of this proposal are needed, particularly:

- the definition of "applicable source,"
- the timeline for establishing monitors is not reasonable,
- clarification of the term "area."

Please find our detailed comments attached.

Sincerely,

Sheila Holman, Director  
Division of Air Quality, NCDENR

Attachment

## **Proposed Data Requirements Rule for the 1-Hour SO<sub>2</sub> NAAQS**

### **Comments from North Carolina Department of Environment and Natural Resources Division of Air Quality (DAQ)**

#### General Comments

#### Applicability to Sources

In addition to the emissions and population thresholds, §51.1202 extends applicability to sources that have “been identified by the air agency or by the EPA Regional Administrator as requiring further air quality characterization.” This criterion, being rather vague and open-ended, creates great uncertainty about how to implement the rule:

- How do we decide which additional facilities to evaluate?
- How does the consultation with the Regional Administrator work?
- Is this an on-going process, or is there a trigger that initiates it?
- Is the evaluation different for these sources than for those that meet the minimum emission and population threshold? If not, why establish those thresholds?

The preamble notes that the 2011 guidance raised many concerns about the level of effort and resources required to develop plans for a large number of small sources. The emissions and population thresholds proposed in this rule are efforts to clearly define the applicable population. But that one phrase (“or has been identified ... as requiring further air quality characterization”) just re-opens the door to all those same concerns. The DAQ strongly recommends either removing the phrase or providing specific criteria for applying it. Additionally, if the phrase remains in the final rule, the DAQ recommends changing the word “or” to “and” such that the rule requires a consultative process between the air agency and EPA. The revised phrase would read, “...been identified by the air agency ~~or~~ and by the EPA Regional Administrator as requiring further air quality characterization.”

#### Subject Facilities in the Same Area

§51.1203 states that “for any area with multiple applicable sources, the air agency ... shall use the same technique (monitoring or modeling) to characterize air quality for all sources in the area.”

The DAQ does not believe it is clear what an “area” is in this situation. Is it the Core Based Statistical Area (CBSA)? What if a facility is outside a CBSA? Then (depending on what an “area” is) it is not clear why we must use the same technique. We recommend removing this restriction of using the same technique for multiple sources within the same area (whatever that area may be).

#### DAQ Response to Specific EPA Requests

*The EPA requests comment on the use of annual emissions (i.e., tons of SO<sub>2</sub> per year) as the metric to be used for an emissions and population-based threshold approach, or, alternatively, for a solely*

*emissions-based threshold approach, to identify SO<sub>2</sub> sources for further ambient air quality characterization with respect to the 1-hour SO<sub>2</sub> NAAQS. The EPA also requests comment on any potential alternative factors that should be considered for defining emissions thresholds, along with any information about the availability of data related to this factor for all SO<sub>2</sub> sources nationally, the time and resources needed to develop a database for this additional factor, any associated technical analysis and rationale for using these other factors in defining source thresholds. (p. 27454)*

The DAQ agrees that the use of annual emissions is an appropriate metric to use to identify sources that meet the minimum requirements for further evaluation. Using this metric will reduce data collection and reporting burden for those non-electric generating sources currently not required to submit 1-hour SO<sub>2</sub> emissions data. The DAQ requests that EPA avoid the exclusive use of the National Emissions Inventory to identify subject sources as it was required in the implementation of the 2008 lead standard. The DAQ requests that EPA allow states to use the most recent annual emissions inventory data certified by facilities and reported to EPA under the Air Emissions Reporting Rule. With this most recent inventory data in mind, the proposal would impact only 10 facilities in North Carolina. Finally, the DAQ suggests that EPA carefully consider the fairness of using an approach that includes a population-based metric.

*EPA solicits comments on the feasibility of the proposed implementation timeline below. (p. 27456)*

This is a very ambitious schedule to establish a new SO<sub>2</sub> source-oriented network, especially if there is extensive negotiation with EPA's regional office on the number and location of monitors. Such negotiation is expected given:

- EPA's Technical Assistance Document (TAD) is vague about monitor siting, deferring to "case-by-case" analysis of each facility.
- This is a new rule with no prior experience to use to gauge the most appropriate network to propose.
- EPA regional approval of network plans may be delayed due to a desire for consistent decisions among regions, states, and facilities.

Other recent rules have not required such rapid deployment of monitors. The NO<sub>2</sub>, SO<sub>2</sub>, and PM<sub>2.5</sub> rules each allowed at least 1.5 years from submittal of the network plan to operation of the monitor.

- The NO<sub>2</sub> rule published Feb 9, 2010, required the network plan on July 1, 2011, and operational sites by January 1, 2013, (and the near road sites were subsequently delayed until 2014 and 2017).
- The SO<sub>2</sub> rule published June 2, 2010, required network plan on July 1, 2011, and operational sites by January 1, 2013.
- The PM<sub>2.5</sub> rule published January 15, 2013, gives states until Jan 1, 2017, to add PM<sub>2.5</sub> to the existing near road sites.

This proposal provides only six months – even though it has a greater monitoring impact than any of the most recent criteria pollutants. Typically, states submit the network plan by July 1, with EPA

approval coming in late-September. It's virtually impossible to then have the entire SO<sub>2</sub> source-oriented network operational three months later.

We recommend an alternative implementation schedule, as described in the next comment.

*The EPA requests that air agencies provide in their comments...any relevant updated information that would support the addition or removal of a source area from this preliminary list, along with relevant rationale and supporting information. (p. 27457)*

There are three facilities on EPA's list that have closed and two facilities that have shut down their coal fired units. These changes should be reflected in the most recent 2013 emissions inventory. The DAQ requests that these five facilities be removed from the list of affected sources.

- Duke Energy Progress – Sutton
- Duke Energy Progress - Lee
- Duke Energy – Buck
- Duke Energy - Riverbend
- DAK Americas

*The EPA requests comment on the approach proposed above. The EPA also requests comments on any alternative approaches that could most effectively address a situation where an air agency is acting in good faith to deploy monitors on time but experiences a delay outside of its control. (p. 27461)*

As noted above, the proposed schedule is ambitious, especially if a site requires multiple monitors – the proposed schedule sets states up to fail and potentially forces us into the modeling approach.

The recent roll out of the near-road NO<sub>2</sub> network had a similarly ambitious schedule. Once EPA realized the tremendous resource and logistics difficulties the schedule created, they revised the rule to phase-in the near road network.

The SO<sub>2</sub> rule most likely requires a more expansive and expensive network than the near-road NO<sub>2</sub> rule.

- The near-road rule requires five sites in NC, which EPA estimated would cost about \$200,000/each.
- The SO<sub>2</sub> source-oriented rule would impact 10 sources in NC, which the proposal estimates will cost \$92,614/each for a single site (although multiple sites may be required) – resulting in a larger, more costly network than even the NO<sub>2</sub> near-road network.

Yet, the SO<sub>2</sub> rule requires this network be implemented in a much more expedient manner than the near-road NO<sub>2</sub> monitors.

We recommend that EPA learn from the NO<sub>2</sub> experience and phase-in the SO<sub>2</sub> source network. Using the following threshold scales:

- Initial monitor for facilities above 5,000 tons must begin operating by Jan 1, 2017;
- Initial monitor for facilities above 3,000 tons must begin operating by Jan 1, 2018;
- Initial monitor for facilities above 1,000 tons must begin operating by Jan 1, 2019;
- If needed, additional monitors for the same facility must begin operating at the rate of one every six months after the initial monitor.

Even the schedule above would be ambitious. For the 10 sources identified, it would require North Carolina to establish:

- Three new monitoring sites within six months of submitting our monitoring plan (and perhaps as little as three months after EPA approved the plan);
- Three more sites during the next twelve months (calendar year 2017);
- Four more sites after that (calendar year 2018);
- In addition to those 10 initial sites, we would simultaneously be establishing additional sites for facilities that required multiple monitors.

The result would be at least 10 SO<sub>2</sub> sites to establish in little more than two years. Considering that EPA is allowing us more than four years to establish five near-road NO<sub>2</sub> sites, even the pace of this alternate SO<sub>2</sub> schedule seems a bit ambitious.

*The EPA requests comment on the two proposed options for design value criteria for SO<sub>2</sub> monitor shutdowns, as well as other values within the 50–80 percent range. EPA requests that commenters provide specific technical rationale supporting any approach they recommend. (p. 27462)*

The DAQ believes it would be simpler to use 80 percent to be consistent with most other criteria pollutants.

The DAQ requests clarification in the event of multiple monitors at a site, does the 50-80 percent criterion apply to each monitor individually or to the collective network? That is, do all monitors have to meet the criteria before you shut any down? Or can you shut down individual monitors as they qualify? We propose that they apply individually, especially if set at 50 percent.

In the event that monitoring is being conducted near a source that shuts down, the DAQ suggests that the monitors be allowed to be shut down immediately. In situations that involve monitoring at a facility that achieves permanent emissions reductions such that it no longer meets the minimum emissions threshold, the DAQ suggests that the monitoring shut-down criteria be followed.

*The EPA requests comment on the 3 policy options presented above, and requests that each commenter provide a clear rationale for their position. The EPA also requests comments on the two procedural options presented above. (p. 27468)*

With regard to the concept of verification of attainment in unclassifiable/attainment areas based on modeling, the DAQ prefers Ongoing Verification Option 2, the assessment of SO<sub>2</sub> emissions changes for each source annually. We believe this to be both the most straight-forward option and the least resource-intensive.

The DAQ also prefers Procedural Option 2 for ongoing verification. An independent submittal to EPA is preferred over the appendix to the monitoring network plan. The annual monitoring plan and the emissions inventory submittals are performed by separate work units on different timelines. The DAQ prefers to deliver the products separately rather than delay one or the other to deliver them together.