

High Level Summary of Meeting with States/Locals/Tribes May 31, 2012

Introduction

This summary describes ideas and thoughts expressed by states/locals/tribes (SLTs) at the May 31 meeting with Environmental Protection Agency (EPA) staff regarding implementation of the 2010 primary 1-hour sulfur dioxide (SO₂) National Ambient Air Quality Standard (NAAQS). While the discussion covered many topics, issues related to the monitoring costs, a hybrid approach, and realistic timeframes received the most attention, with the following general messages:

Many SLTs emphasized the need to deal with real problems and real world conditions and, thus, base decisions on monitoring data.

There was strong support for a hybrid approach which allows states flexibility to use monitoring or modeling to determine whether areas are meeting or not meeting the standard. Furthermore, a threshold should be established to prioritize the sources of interest.

Some SLTs urged EPA to consider practicable timelines and pointed out that the new SO₂ standard is a significant departure (new form, more stringent, etc.) from the past. A phased approach is necessary such as was done for NO₂ and Pb, and overly ambitious timelines on SO₂ will force a diversion of resources from other programs.

This summary below is organized into three broad topics consistent with the White Paper: monitoring, modeling, and implementation. In addition, key subtopics addressed are thresholds (monitoring/modeling), actual emissions (modeling), hybrid approach, guidance/rulemaking, and timing (implementation). A list of in-person participants is attached; there were several additional SLT representatives on the phone.

Limitations

Please note that this is a high level summary, reflecting concepts EPA heard during the meeting. It is not intended to be a full transcript or include all topics discussed. As EPA moves forward with implementation of the 2010 SO₂ NAAQS, the Agency will be informed both by concepts contained in this summary as well as concepts not described in this summary. Like all of the SO₂ implementation-related materials produced by EPA to date (e.g., the March 2011 and September 2011 guidance memoranda; the April 12, 2012 letters to state agencies and tribal representatives; and the May 2012 White Paper) this summary does not constitute final or binding agency action. These materials are part of an overall work in progress toward developing practicable approaches to implementing the SO₂ NAAQS that assure expeditious protection of public health. Ultimately, this stakeholder outreach process may lead to revised guidance or additional rulemaking.

Monitoring

Some SLTs emphasized the need to deal with real problems and real world conditions and, thus, base decisions on monitoring.

Some SLTs stated that the monitoring approach worked in the past and, in some cases current monitors are adequate. Several SLTs stated that monitors are more cost effective where there are many sources such as refineries and ports. Some SLTs suggested that 2-3 monitors are sufficient at electricity generating units.

Although it may not be possible to site a monitor at the location of expected maximum concentration, some SLTs support the monitoring approach. Some noted that industry has been very cooperative in installing monitors. Some SLTs stated that a meteorological tower should also be required in each location. Some SLTs also stated that an exit plan for monitors is needed; i.e., an incentive is needed that allows for removal of the monitor if the monitor is in compliance and source emissions are in compliance.

Many SLTs recognized that cost is a big issue. One SLT stated the cost to site 3 monitors around all 2,000 tons per year sources in the state would be \$12 million. Another SLT stated they would need to triple their monitoring network in order to site 3 monitors per source. Some SLTs stated that any additional monitors and operation/maintenance need to be paid for by the sources. Some SLTs suggested EPA should require sources to pay for monitors and operation and maintenance. Some SLTs noted that EPA's annual network review is an opportunity for EPA to identify the need for additional monitors. A few SLTs stated that a fee rule would not be a good way to fund new monitors. Some SLTs noted that the states have experience requiring industry to monitor.

Some SLTs noted that many monitors are not included in EPA's Air Quality System (AQS) database. Many sources currently monitor for Prevention of Significant Deterioration (and other) purposes and most have at least 2 monitors. Some states have agreements with other federal agencies to run SO₂ monitors. Some SLTs believe that data not publically reported previously may be useful if under state oversight.

Some SLTs stated that if EPA relies on industry monitoring data, then EPA needs to develop a monitoring rule which includes guidance regarding the use of these data. Some SLTs believe a State would need to review, quality assure, and enter the industry data into EPA's AQS. This will take time.

Thresholds

Some SLTs stated that past monitoring data can help define threshold levels. Some also stated that stack heights and population may need to be considered beyond just mass (tons per year), but that a population-weighted emissions index (and population-based factors) is not necessarily helpful. Some SLTs indicated the threshold should be set by EPA in order to be more defensible than state by state decisions.

Some SLTs generally supported a threshold covering larger sources. A few SLTs recommended the threshold be combined with a phased program which covers larger sources first.

Some suggested the threshold should be 2,000 - 3,000 tons per year. Some SLTs also stated that selecting a threshold is not an easy determination since even small sources can cause violations in some cases, such as in complex terrain. Other SLTs stated that covering 90% of total SO₂ emissions may be the wrong threshold and set the wrong precedent for other pollutants. Some SLTs indicated it may be better to base the decision on air quality.

Some SLTs noted a threshold could be an incentive for sources to lower emissions. Rather than using current emission levels, some SLTs suggested the threshold should be based on post-MACT, actual annual emissions, in order to give sources a chance to get below the threshold emission level via permit. A few SLTs noted that the threshold is critically important for defining areas where additional effort is not needed in order to avoid a waste of resources, such as requiring modeling in areas that are very unlikely to violate.

Modeling

Some SLTs stated that modeling should not be used for designations. They indicated that modeling results are 2-3 times higher than monitoring. Some SLTs also noted that it is difficult to redesignate to attainment through modeling (e.g., where a violation is modeled on side of cliff or over water).

Some SLTs stated that many times modeling provides good results and thus it should be considered on a case-by-case basis. In contrast, other SLTs stated that the AERMOD model overestimates and is not accurate. One SLT stated that EPA needs to update 40 CFR part 51 Appendix W regarding emissions variability.

A small number of SLTs stated it is okay to use modeling to show attainment, but it should not be used to designate nonattainment areas. Some of these SLTs were also concerned about how an SO₂ approach might be applied to other NAAQS pollutants.

Some SLTs suggested EPA guidance is needed on several issues, including the need for on-site meteorological data, the number of allowable exceedances, whether cumulative modeling including nearby small sources is necessary (one SLT suggested it should not be), and how to model multiple sources near each other.

Some SLTs also did not want EPA to require remodeling year after year. They suggested that continuous emissions monitoring system (CEMS) data would be needed to assure the source stays at the permitted level. Some SLTs stated that some permit limits could be used to track emissions at non-CEMS sources.

Some SLTs do not trust modeling. One SLT stated that an SO₂ unit with great controls still might model nonattainment.

Actual Emissions

Many SLTs stated that there is no need to model maximum emissions since the standard is in the form of a percentile. Other SLTs suggested using future permit levels in the modeling to reflect expected emission reductions from the Cross-State Air Pollution Rule and Mercury and Air Toxics Standards.

One SLT suggested that, in implementing a modeling-based approach using actual emissions, EPA should allow a statistical approach to source characterization based on a distribution of hourly actual emissions values; i.e., an approach that does not assume the source operates at the peak hourly value all year.

Some SLTs recommended EPA exempt certain source categories such as infrequently used units (e.g., 500 hours per year), emissions from fuel reserve (natural gas units with oil reserves), and emergency equipment (e.g., less than 200 hours per year).

Implementation

Several SLTs stated that, if EPA uses modeling to determine attainment, EPA should allow states to address any violations through adjusting title V permits as described in the White Paper instead of redesignating areas. This has worked in the past in some states. However, one SLT stated that Prevention of Significant Deterioration permitting is not appropriate for this approach since it is rarely triggered for existing sources. One SLT suggested instead considering use of the section 111(d) program for addressing sources of concern.

Regarding the 110(a)(1) approach, some SLTs felt there was merit to considering this as an available option, but not a requirement. They indicated that, while timing it with initial infrastructure SIPs would have been impossible, it does offer efficiencies over redesignating areas if its scope is properly limited and prioritized to areas where there is likely to be a problem. However, one SLT stated that the 110(a) approach flips the designation process on its ear by assuming problems in the unclassifiable areas, and a monitor should confirm those problems before requiring control measures.

If EPA allows implementation through permitting changes, several SLTs stated that EPA should not require SIP revisions for all permit changes. Some SLTs said their title V programs give them authority to set NAAQS-based limits without going through a SIP process and required the NAAQS to be met before a title V permit could be issued.

Hybrid

There was strong support for a “hybrid” approach which allows states flexibility to use monitoring or modeling to determine whether areas are meeting or not meeting the

standard. The approach was described as a “Big Box” which includes acceptable methods for conducting an air quality assessment and the subsequent actions necessary to protect public health.

Many SLTs supported a hybrid approach where, given a range of sources that must be characterized in some way, the States would choose whether to characterize the air quality using modeling, monitoring or both based on general EPA guidance. They view this approach as flexible, less costly, more efficient course. Some SLTs noted that professional judgment is needed in order to determine the number and location of monitors to characterize a source (even if it cannot be placed at the location of maximum concentration), to consider populated areas, and to not close the door on modeling.

A few SLTs suggested that modeling could serve as an initial screen, and that monitors could be deployed in areas that did not screen out based on modeling. The monitoring data would then serve as the basis for determining attainment in those areas. Some SLTs stated that most sources would pass the modeling test. A few SLTs stated that if modeling shows very high values (e.g., ten times the standard), then the area should be designated nonattainment.

Rulemaking or Guidance

Some SLTs stated that the rulemaking is needed. Some SLTs also recognized that it is not possible to cover everything in rules or guidance and that professional judgment is necessary.

Timing

Some SLTs stated a phased approach may be helpful given resource constraints and the time needed to add monitors at larger sources and expand the monitoring network. They advised the Agency to not rush these decisions, but to take a more deliberate approach such as was done for NO₂ and Pb.

In further urging EPA to consider practicable timelines, some SLTs pointed out that the new SO₂ standard is a significant departure (new form, more stringent, etc.) from the past SO₂ standard, and thus time is needed to get it done. Some SLTs stated that, with available resources and other pollutants and programs to focus on, a phased approach is necessary; further, overly ambitious timelines on SO₂ will force a diversion of resources from other programs.

Some SLTs noted that time is needed to analyze emissions variability, improve and validate AERMOD for low wind speed cases, update Appendix W, collect on-site meteorological data, put in additional monitors, determine the modeling threshold value based on additional data, and model and revise permits.

Other SLTs suggested the need for a reasonable schedule which would not require a SIP in all cases and would allow time for states to decide if modeling or monitoring is best. Some SLTs suggested 5 years may be a reasonable timeframe to address modeling, controls, rule development, and rule adoption. A few SLTs stated that if modeling is

required, it will be a long process. Even with the hybrid approach, some SLTs noted that time is needed for EPA to issue guidance/rules to establish that approach. Some SLTs stated that even if sources pay for monitors it would not be faster, since time is needed for modeling to site monitors.

Some SLTs suggested EPA wait 3 years before implementing the 1-hour SO₂ NAAQS since the SO₂ standard is not the drivers for industry (Mercury and Air Toxics Standards rulemaking is the driver). Some SLTs stated it would be 2015 before states know what sources will do with the Cross-State Air Pollution Rule and Mercury and Air Toxics Standards and, thus, 2020 is a reasonable date.

Some SLTs did not want timelines for unclassifiable areas, and noted that unclassifiable areas historically have had no timeline to show attainment and the Clean Air Act does not say what to do with unclassifiable areas. Stakeholders noted that there are many unclassifiable areas for other pollutants and asked whether this SO₂ action would set a precedent that could be a huge resource burden.

**ATTENDEES FOR SO₂ NAAQS IMPLEMENTATION STAKEHOLDER MEETING
May 31 - State, Local, and Tribal Government Representatives**

Abraczinskas	Mike	Division of Air Quality, NC Dept. of Environment & Natural Res.
Alteri	Sean	Kentucky Division for Air Quality
Bacon	Leigh	State of AL-DEM/Planning Branch Air Division
Bamford	Rob	State of Nevada
Bates	Mike	Arkansas Dept. of Envir. Quality
Bergeron	Timothy	Louisiana Dept. of Environmental Quality
Buckler	Chuck	Division of Air Quality, NC Dept. of Environment & Natural Res.
Calcagni	John	EPA Region 4
Capp	James	Georgia EPD
Donald	Dahl	EPA Region 1
Dowd	Michael	Virginia Dept. of Environmental Quality
Ferguson	Bruce	Mississippi Department of Environmental Quality
Glass	John	SC DHEC BAQ
Hellwig	Vince	State of Michigan
Hildebrand	Susana	Texas Commission on Environmental Quality
Hoch	Joseph	Wisconsin Dept. of Natural Resources
Hodanbosi	Bob	Ohio EPA
Holman	Sheila	Division of Air Quality, NC Dept. of Environment & Natural Res.
Hornback	John	Metro 4/SESARM
Johnson	Dan	Westar Energy, Inc.
Kaleel	Rob	Lake Michigan Air Directors Consortium (LADCO)
Kiss	Mike	Virginia DEQ-Central Office
Klemp	David	Montana Dept. of Environmental Quality
Ling	Michael	Environmental Protection Agency
Lloyd	Peter	Forsyth Co. Office of Environmental Assistance & Protection
Mastro	Donna	EPA Region 3
McNeill	David	Utah DEQ
O'Clair	Terry	NC Dept. of Health
Page	Steve	Environmental Protection Agency
Pella	Theresa	Central States Air Resource Agency
Pirolli	Richard	Connecticut Dept. of Energy & Protection
Post	Zarena	Texas Commission on Environmental Quality
Ragland	Bob	Forsyth Co. Office of Environmental Assistance & Protection
Rao	Mya	Mississippi Department of Environmental Quality
Reece	Myra	SC DHEC BAQ
Remer	Greg	State of Nevada
Reynolds	Scott	SC DHEC BAQ
Schulman	Arleen	Pennsylvania Department of Environmental Proteciton
Scofield	Steve	EPA Region 4
Sliwinski	Rob	NYSDEC

Summerhays	John	EPA Region 5
Underhill	Jeff	Dept. of Envir. Services/State of New Hamp.
Waterson	Sara	EPA Region 4
Wayland	Chet	Environmental Protection Agency
Wierman	Susan	MARAMA